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NEWS 16	JUN 30	STN AnaVist enhanced with database content from EPFULL
NEWS 17	JUL 28	CA/CAplus patent coverage enhanced
NEWS 18	JUL 28	EPFULL enhanced with additional legal status information from the epoline Register
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NEWS 22	AUG 13	CA/CAplus enhanced with printed Chemical Abstracts page images from 1967-1998
NEWS 23	AUG 15	CAOLD to be discontinued on December 31, 2008
NEWS 24	AUG 15	CAplus currency for Korean patents enhanced
NEWS 25	AUG 25	CA/CAplus, CASREACT, and IFI and USPAT databases enhanced for more flexible patent number searching
NEWS 26	AUG 27	CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information
NEWS 27	SEP 18	Support for STN Express, Versions 6.01 and earlier, to be discontinued

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FILE COVERS 1907 - 22 Sep 2008 VOL 149 ISS 13  
FILE LAST UPDATED: 21 Sep 2008 (20080921/ED)

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E3          0  --> US2006192180/PN
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E8          1      US2006205/PN
E9          1      US2006207/PN
E10         1      US2006208/PN
E11         1      US2006211/PN
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E9 1 US20060192186/PN  
E10 1 US20060192193/PN  
E11 4 US20060192194/PN  
E12 1 US20060192195/PN

=> s e3;d all  
L1 1 US20060192180/PN

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:74133 CAPLUS  
DN 142:156879  
ED Entered STN: 28 Jan 2005  
TI Modified polyvinyl acetal binder resin for coating paste with good applicability  
IN Ichitani, Motokuni; Ii, Daizo; Ochitani, Yukio; Takahashi, Hideyuki;  
Sakashita, Katsuaki  
PA Sekisui Chemical Co., Ltd., Japan  
SO PCT Int. Appl., 39 pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
IC ICM C08F008-48  
ICS C09D129-14  
CC 37-3 (Plastics Manufacture and Processing)  
Section cross-reference(s): 38, 74, 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005007710	A1	20050127	WO 2004-JP9127	20040628
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP	2005089695	A	20050407	JP 2003-328162	20030919
JP	2005268055	A	20050929	JP 2004-79082	20040318
JP	2005303008	A	20051027	JP 2004-117062	20040412
JP	2005298792	A	20051027	JP 2004-190354	20040628
JP	4146823	B2	20080910		
EP	1637546	A1	20060322	EP 2004-746596	20040628
	R: BE, DE, FR, GB, IT				
CN	1809598	A	20060726	CN 2004-80017415	20040628
JP	2005298793	A	20051027	JP 2004-233469	20040810

JP 2005113133	A	20050428	JP 2004-270142	20040916
US 20060192180	A1	20060831	US 2005-561971	20051222 <--
PRAI JP 2003-183187	A	20030626		
JP 2003-328162	A	20030919		
JP 2003-328163	A	20030919		
JP 2004-79082	A	20040318		
JP 2004-79083	A	20040318		
JP 2004-117062	A	20040412		
WO 2004-JP9127	W	20040628		
CLASS				
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES		
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WO 2005007710	ICM	C08F008-48		
	ICS	C09D129-14		
	IPCI	C08F0008-48 [ICM, 7]; C08F0008-00 [ICM, 7,C*]; C09D0129-14 [ICS, 7]; C09D0129-00 [ICS, 7,C*]		
	IPCR	C08F0008-00 [I,C*]; C08F0008-28 [I,A]; C08F0008-48 [I,A]; C09D0129-00 [I,C*]; C09D0129-14 [I,A]		
	ECLA	C08F008/28+216/06		
JP 2005089695	IPCI	C08F0008-28 [ICM, 7]; C08F0008-00 [ICM, 7,C*]; C03C0008-16 [ICS, 7]; C03C0008-00 [ICS, 7,C*]; C08F0016-06 [ICS, 7]; C08F0016-00 [ICS, 7,C*]; C08K0003-40 [ICS, 7]; C08K0003-00 [ICS, 7,C*]; C08L0029-14 [ICS, 7]; C08L0029-00 [ICS, 7,C*]; C09J0129-14 [ICS, 7]; C09J0129-00 [ICS, 7,C*]; H01J0011-02 [ICS, 7]		
	IPCR	C03C0008-00 [I,C*]; C03C0008-16 [I,A]; C08F0008-00 [I,C*]; C08F0008-28 [I,A]; C08F0016-00 [I,C*]; C08F0016-06 [I,A]; C08K0003-00 [I,C*]; C08K0003-40 [I,A]; C08L0029-00 [I,C*]; C08L0029-14 [I,A]; C09J0129-00 [I,C*]; C09J0129-14 [I,A]; H01J0011-02 [I,A]; H01J0011-02 [I,C*]		
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JP 2005268055	IPCI	H01B0001-22 [ICM, 7]; H05K0003-12 [ICS, 7]; H01G0004-12 [ICS, 7]		
	IPCR	H01B0001-22 [I,A]; H01B0001-22 [I,C*]; H01G0004-12 [N,A]; H01G0004-12 [N,C*]; H05K0003-12 [I,A]; H05K0003-12 [I,C*]		
	FTERM	5E001/AB03; 5E001/AC09; 5E001/AH01; 5E001/AJ01; 5E343/AA23; 5E343/BB23; 5E343/BB24; 5E343/BB25; 5E343/BB44; 5E343/BB48; 5E343/BB49; 5E343/BB76; 5E343/DD03; 5E343/DD64; 5E343/FF02; 5E343/FF11; 5E343/GG02; 5E343/GG08; 5G301/DA10; 5G301/DA42; 5G301/DD01		
JP 2005303008	IPCI	H01G0004-12 [ICM, 7]; B28B0001-30 [ICS, 7]; C04B0035-00 [ICS, 7]; C04B0035-632 [ICS, 7]; C04B0035-63 [ICS, 7,C*]; B28B0011-00 [ICS, 7]		
	IPCR	B28B0001-30 [I,A]; B28B0001-30 [I,C*]; B28B0011-00 [N,A]; B28B0011-00 [N,C*]; C04B0035-00 [I,A]; C04B0035-00 [I,C*]; C04B0035-63 [I,C*]; C04B0035-632 [I,A]; H01G0004-12 [I,A]; H01G0004-12 [I,C*]		
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		4G052/DA08; 4G052/DB12; 4G052/DC06; 4G055/AA08; 4G055/AA10; 4G055/AC01; 4G055/AC09; 4G055/BA22; 4G055/BA35; 4G055/BA43; 5E001/AB06; 5E001/AH01; 5E001/AJ02
JP 2005298792	IPCI	H01B0001-22 [I,A]; C08F0216-38 [I,A]; C08F0216-00 [I,C*]; C08L0029-14 [I,A]; C08L0029-00 [I,C*]; C08K0003-00 [I,A]; C08K0005-00 [I,A]
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EP 1637546	IPCI	C08F0008-48 [ICM,7]; C08F0008-00 [ICM,7,C*]; C09D0129-14 [ICS,7]; C09D0129-00 [ICS,7,C*]
	IPCR	C08F0008-00 [I,C*]; C08F0008-28 [I,A]; C08F0008-48 [I,A]; C09D0129-00 [I,C*]; C09D0129-14 [I,A]
	ECLA	C08F008/28+216/06
CN 1809598	IPCI	C08F0008-48 [I,A]; C08F0008-00 [I,C*]; C09D0129-14 [I,A]; C09D0129-00 [I,C*]
JP 2005298793	IPCI	C08L0029-14 [ICM,7]; C08L0029-00 [ICM,7,C*]; C08F0016-38 [ICS,7]; C08F0016-00 [ICS,7,C*]; C08K0005-04 [ICS,7]; C08K0005-00 [ICS,7,C*]
	IPCR	C08F0016-00 [I,C*]; C08F0016-38 [I,A]; C08K0005-00 [I,C*]; C08K0005-04 [I,A]; C08L0029-00 [I,C*]; C08L0029-14 [I,A]
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JP 2005113133	IPCI	C09D0011-10 [ICM,7]; H01B0001-22 [ICS,7]; H01B0003-00 [ICS,7]; H05K0003-12 [ICS,7]
	IPCR	C09D0011-10 [I,A]; C09D0011-10 [I,C*]; H01B0001-22 [I,A]; H01B0001-22 [I,C*]; H01B0003-00 [I,A]; H01B0003-00 [I,C*]; H05K0003-12 [I,A]; H05K0003-12 [I,C*]
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US 20060192180	IPCI	H01B0001-12 [I,A]

NCL 252/500.000  
ECLA C08F008/28+216/06

AB A modified polyvinyl acetal with excellent dispersibility for inorg. powders is useful for a binder resin for coating pastes, a conductive paste, a ceramic paste or a glass paste for use in, e.g., display panel or semiconductor device fabrication, etc. The modified polyvinyl acetal comprises a vinyl ester unit, a vinyl alc. unit, an  $\alpha$ -olefin unit and an acetal unit. Thus, acetalizing a saponified poly(vinyl alc.) having ethylene unit content 10 mol% and saponification degree 88 mol% with Bu aldehyde

gave a modified polyvinyl acetal resin which was kneaded with 2020 SS (Ni powder) and  $\alpha$ -terpineol to give a conducting paste.

ST elec conducting paste manuf binder modified vinyl acetal resin

IT Aluminoborosilicate glasses

RL: MOA (Modifier or additive use); USES (Uses)

(lead aluminoborosilicate, powder; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

IT Electrically conductive pastes

Semiconductor device fabrication

(manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

IT Polyvinyl acetals

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP

(Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(paste containing S-Lec BM-S; manufacture of modified polyvinyl acetal binder

resin for coating paste with good dispersibility)

IT 7440-02-0, 2020SS, uses

RL: MOA (Modifier or additive use); USES (Uses)

(2020SS, conductive powder; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

IT 12047-27-7, BT 03, uses

RL: MOA (Modifier or additive use); USES (Uses)

(ceramic powder; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

IT 24937-78-8DP, EVA, saponified, acetal derivs.

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP

(Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Konica Corp; JP 2002283699 A 2002 CAPLUS
- (2) Kuraray Co Ltd; JP 63-79741 A 1988 CAPLUS
- (3) Kuraray Co Ltd; JP 63-79752 A 1988 CAPLUS
- (4) Kuraray Co Ltd; EP 1384731 A1 2004 CAPLUS
- (5) Kuraray Co Ltd; US 20040024137 A1 2004
- (6) Kuraray Co Ltd; JP 200468013 A 2004

=> file reg;s 7440-02-0/rn;s 12047-27-7/rn; 24937-78-8/rn		
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DICTIONARY FILE UPDATES: 21 SEP 2008 HIGHEST RN 1051326-19-2

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L2 1 7440-02-0/RN

L3 1 12047-27-7/RN

24937-78-8 IS NOT A RECOGNIZED COMMAND

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For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> s 24937-78-8/rn  
L4 1 24937-78-8/RN

=> d 12;d 13;d 14

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 7440-02-0 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Nickel (CA INDEX NAME)  
OTHER NAMES:  
CN 2020SS  
CN Alcan 756  
CN B 111W  
CN B 113W  
CN C.I. 77775  
CN Carbonyl 255  
CN Carbonyl Ni 123  
CN Carbonyl Ni 283  
CN Carbonyl nickel  
CN Carbonyl Nickel 123  
CN Carbonyl Nickel 283  
CN Carbonyl Nickel 287  
CN Celmet  
CN Celmet 4  
CN Celmet 8  
CN Cerac N 2003

CN CHT  
CN CNP 525  
CN CNS 10 Micron  
CN DNI 20  
CN E 12  
CN E 12 (metal)  
CN Exmet 4 Ni X-4/0  
CN Fibrex  
CN Fibrex (metal fiber)  
CN Fibrex P  
CN Fibrex P (metal)  
CN Fukuda 287  
CN HDNP 400  
CN Incofoam  
CN N 1  
CN N 1000  
CN N 1000 (metal)  
CN N 100ES  
CN N 154  
CN NDHT 90  
CN NDT 60  
CN NDT 65  
CN NDT 90  
CN NI 110104  
CN NI 123  
CN Ni 210  
CN NI 255AC  
CN NI 287  
CN Ni 4303T  
CN Ni-Flake 95  
CN Ni-J 20  
CN Nickel element  
CN Nicrobraz LM:BNi 2  
CN NiFL  
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for  
DISPLAY  
DR 8049-31-8, 53527-81-4, 134631-46-2, 17375-04-1, 112084-17-0, 39303-46-3,  
195161-84-3  
MF Ni  
CI COM  
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA,  
CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST,  
CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DRUGU, EMBASE, ENCOMPLIT,  
ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA,  
MEDLINE, MRCK\*, MSDS-OHS, PIRA, PROMT, RTECS\*, TOXCENTER, ULIDAT,  
USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Ni

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

362919 REFERENCES IN FILE CA (1907 TO DATE)  
17562 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
363442 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 12047-27-7 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Barium titanium oxide (BaTiO<sub>3</sub>) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Barium titanate(IV) (BaTiO<sub>3</sub>) (7CI)  
OTHER NAMES:  
CN 5622ON01  
CN Barium metatitanate  
CN Barium metatitanate (BaTiO<sub>3</sub>)  
CN Barium titanate  
CN Barium titanate (BaTiO<sub>3</sub>)  
CN Barium titanium oxide  
CN Barium titanium trioxide  
CN BT 01  
CN BT 02  
CN BT 03  
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CN BT 04A  
CN BT 05  
CN BT 05 (filler)  
CN BT 07  
CN BT 10  
CN BT 10 (titanate)  
CN BT 100M  
CN BT 100P  
CN BT 100PR  
CN BT 100T  
CN BT 16  
CN BT 201  
CN BT 203  
CN BT 204  
CN BT 206  
CN BT 303  
CN BT 325  
CN BT 325 (titanate)  
CN BT 335  
CN BT 5100  
CN BT 8  
CN BT 8 (oxide)  
CN BT-HD 9DX  
CN BT-HP 100  
CN BT-HP 8KB2  
CN BT-HP 8YF  
CN BT-HP 9DX  
CN BT-SA  
CN BTO 30  
CN BTZ 09  
CN CFPI  
CN HBT 3  
CN HPB  
CN HPB (titanate)  
CN HPB 1000  
CN HPBT 1  
CN K-Plus 16  
CN Kyorix BT-HD 9DX  
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for  
DISPLAY  
AR 12642-89-6  
DR 859505-07-0, 928048-64-0, 892125-11-0, 942045-70-7, 1028693-40-4,

12656-53-0, 7787-45-3, 70699-63-7, 52869-94-0, 160462-52-2, 203796-96-7,  
208713-64-8, 225239-81-6, 229640-62-4, 237755-05-4, 358369-13-8,  
412932-53-7, 554402-75-4, 683228-79-7

MF Ba O3 Ti

CI COM, MAN

LC STN Files: AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS,  
CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DETHERM\*, EMBASE,  
IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK\*, MSDS-OHS, PIRA, PROMT, RTECS\*,  
SPECINFO, TOXCENTER, TULSA, USPAT2, USPATFULL, USPATOLD  
(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

25798 REFERENCES IN FILE CA (1907 TO DATE)  
948 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
25820 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 24937-78-8 REGISTRY

ED Entered STN: 16 Nov 1984

CN Acetic acid ethenyl ester, polymer with ethene (CA INDEX NAME)

OTHER NAMES:

CN 1005VN3

CN 1010VN3

CN 1020VN5

CN 10457-101C

CN 175HY

CN 1830H

CN 1900W

CN 204CS95

CN 220ET

CN 3043H

CN 3130SB

CN 3135F

CN 3175LGZ

CN 334N

CN 33G1A

CN 3507C

CN 3F10

CN 400HQ

CN 40L03

CN 40W

CN 4110F

CN 510A

CN 525BP

CN 547D

CN 54C

CN 630F

CN 7140F

CN 7350M

CN 7B54A

CN 83PLD

CN 84D

CN A 2540

CN A 3400L  
CN A 400  
CN A 400 (vinyl polymer)  
CN A 416  
CN A 416 (polymer)  
CN A 443/31  
CN A 9918  
CN AC 400  
CN AC 400 (vinyl polymer)  
CN AC 400A  
CN AC 401  
CN AC 405  
CN AC 405S  
CN AC 405T  
CN AC 410  
CN AC 430  
CN AC 440  
CN AC-P 400

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for  
DISPLAY

DR 852392-82-6, 910806-10-9, 960375-56-8, 693786-68-4, 914656-27-2,  
919765-14-3, 942929-03-5, 946400-84-6, 458549-50-3, 158707-29-0,  
173833-40-4, 174820-52-1, 122730-03-4, 53637-14-2, 58252-58-7, 58858-06-3,  
123757-93-7, 60529-82-0, 64296-24-8, 129291-57-2, 129496-11-3, 97445-08-4,  
103470-05-9, 103843-24-9, 51312-30-2, 141255-84-7, 111367-02-3,  
112659-44-6, 112820-85-6, 137802-65-4, 74566-07-7, 77348-35-7,  
148709-22-2, 78355-65-4, 143710-26-3, 144046-56-0, 144246-76-4,  
81406-40-8, 90249-44-8, 149779-75-9, 86904-51-0, 88024-59-3, 39457-29-9,  
116811-82-6, 117217-63-7, 117217-64-8, 117217-66-0, 117217-68-2,  
117313-46-9, 183815-97-6, 212906-07-5, 217301-38-7, 271594-73-1,  
288101-54-2, 299438-02-1, 327064-05-1, 392231-02-6, 396079-21-3,  
470462-00-1, 642471-13-4, 685866-61-9

MF (C4 H6 O2 . C2 H4)x

CI PMS, COM

PCT Polyolefin, Polyvinyl

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAPLUS,  
CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DRUGU,  
EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, PIRA, PROMT,  
RTECS\*, TOXCENTER, USPAT2, USPATFULL, USPATOLD

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

CM 1

CRN 108-05-4

CMF C4 H6 O2

AcO—CH=CH<sub>2</sub>

CM 2

CRN 74-85-1

CMF C2 H4

H<sub>2</sub>C=CH<sub>2</sub>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

44066 REFERENCES IN FILE CA (1907 TO DATE)  
3697 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
44104 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus			
COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION	
FULL ESTIMATED COST	8.76	16.76	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION	
CA SUBSCRIBER PRICE	0.00	-0.80	

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FILE COVERS 1907 - 22 Sep 2008 VOL 149 ISS 13  
FILE LAST UPDATED: 21 Sep 2008 (20080921/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/legal/infopolicy.html>

=> s polyvinyl acetal resin#  
107856 POLYVINYL  
51840 ACETAL  
830679 RESIN#  
L5 428 POLYVINYL ACETAL RESIN#  
(POLYVINYL (W) ACETAL (W) RESIN#)

=> d 1-10 all

L5 ANSWER 1 OF 428 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2008:1119379 CAPLUS  
ED Entered STN: 18 Sep 2008  
TI The polyvinyl acetal resin and its  
manufacture [machine translation]  
IN Tsuji, Tsuyoshi; Yoshii, Shigeharu; Kosaka, Masanobu  
PA Denki Kagaku Kogyo Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 9pp.  
CODEN: JKXXAF

DT Patent  
 LA Japanese  
 CC 35 (Chemistry of Synthetic High Polymers)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008214435	A	20080918	JP 2007-51674	20070301
PRAI	JP 2007-51674				

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008214435	IPCI	C08F0008-28 [I,A]; C08F0008-00 [I,C*]; C08F0006-00 [I,A]; C08F0016-06 [I,A]; C08F0016-00 [I,C*]
	FTERM	4J100/AD02P; 4J100/BA02H; 4J100/BA03H; 4J100/BA16H; 4J100/BC04H; 4J100/BC43H; 4J100/BC53H; 4J100/CA31; 4J100/DA25; 4J100/GC04; 4J100/GC29; 4J100/GC35; 4J100/HA43; 4J100/HA61; 4J100/HB25; 4J100/HB33; 4J100/HB39; 4J100/HB43; 4J100/HB44; 4J100/HB52; 4J100/HB58; 4J100/HC09; 4J100/HC17; 4J100/HC18; 4J100/HC19; 4J100/HC20; 4J100/HC27; 4J100/HC39; 4J100/HC71; 4J100/HE12; 4J100/JA01; 4J100/JA03

AB [Machine Translation of Descriptors]. The polyvinyl acetal resin which the volatile organic substance does not generate in large amount by heating etc. is provided. Are the polyvinyl acetal resin obtained by making the acetalization reaction of the poly(vinyl alc.) and the aldehyde under acid catalyst existence, obtain the residue by filtering the reactant of the acetalization reaction, add water to the those residue, and it is considered as slurry. Those slurry in the range of  $\pm 5$  °C from the glass transition temperature of the polyvinyl acetal resin, the contents of the volatile organic substance generated when it heats for 1 h by 100 °C obtained from heat-treating 60-120 min. consider it as the polyvinyl acetal resin which is  $\leq 10$  ppm.

L5 ANSWER 2 OF 428 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2008:1071239 CAPLUS  
 ED Entered STN: 05 Sep 2008  
 TI Film and intermediate film for laminated glass composed of the same  
 IN Morikawa, Keisuke; Endo, Ryohei; Moriguchi, Nobuhiro  
 PA Kuraray Co., Ltd., Japan  
 SO PCT Int. Appl., 34pp.  
 CODEN: PIXXD2

DT Patent  
 LA Japanese  
 CC 57 (Ceramics)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008105380	A1	20080904	WO 2008-JP53226	20080226
	W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRAI JP 2007-48611 A 20070228  
JP 2007-48612 A 20070228

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2008105380	IPCI	C03C0027-12 [I,A]; B32B0017-10 [I,A]; B32B0017-06 [I,C*]; B60J0001-00 [I,A]; C08J0005-18 [I,A]; C08K0003-10 [I,A]; C08K0003-00 [I,C*]

AB Disclosed is a film composed of at least one thermoplastic resin (A) selected from the group consisting of polyvinyl acetal resins, polyethylene-vinyl acetate copolymer resins, polyurethane resins, polyester resins and polyacrylic resins. This film contains fine particles of a copper compound (B) having an average particle diameter of not more than 200 nm. Since this film is excellent in transparency, heat insulation, electromagnetic wave transmission and durability, it is suitable as an intermediate film for laminated glass.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Central Glass Co Ltd; EP 0727306 A2 1996 CAPLUS
- (2) Central Glass Co Ltd; JP 08-259279 A 1996 CAPLUS
- (3) Central Glass Co Ltd; US 5830568 A1 1996 CAPLUS
- (4) Daicel Chemical Industries Ltd; JP 08-73653 A 1996 CAPLUS
- (5) Yamamoto, R; JP 62-143306 A 1987 CAPLUS

L5 ANSWER 3 OF 428 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2008:973884 CAPLUS

DN 149:246940

ED Entered STN: 14 Aug 2008

TI Process for producing polyvinyl acetal resin

IN Sugioka, Takashi; Iwasaki, Hideharu

PA Kuraray Co., Ltd., Japan

SO PCT Int. Appl., 23pp.

CODEN: PIXXD2

DT Patent

LA Japanese

CC 35-4 (Chemistry of Synthetic High Polymers)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008096403	A1	20080814	WO 2007-JP51826	20070202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRAI WO 2007-JP51826 20070202

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2008096403	IPCI	C08F0008-28 [I,A]; C08F0008-00 [I,C*]; C08F0016-38 [I,A]; C08F0016-00 [I,C*]

AB A process for producing a polyvinyl acetal resin through reaction of polyvinyl alc. with a carbonyl compound, characterized in that the content of alkali metal salts of polyvinyl alc.

is 300 ppm or less in terms of alkali metal, and that the reaction is performed at 40° to 200°C in the presence of carbonate catalyst. Thus, there is provided an efficient process for producing a polyvinyl acetal resin of high quality strikingly reduced in the residue of impurities, such as metal salts and acids. Thus, polyvinyl butyral was obtained from the reaction of polyvinyl alc. and butyraldehyde in the presence of CO<sub>2</sub>.

ST polyvinyl butyral carbon dioxide; polymn polyvinyl alc butyraldehyde  
IT Polymerization apparatus

(preparation of polyvinyl acetal resin)

IT Polyvinyl butyral

RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of polyvinyl acetal resin)

IT 124-38-9, Carbon dioxide, uses

RL: CAT (Catalyst use); USES (Uses)  
(preparation of polyvinyl acetal resin)

IT 915977-69-4P, Polyvinyl butyral

RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of polyvinyl acetal resin)

IT 7732-18-5, Water, uses

RL: NUU (Other use, unclassified); USES (Uses)  
(preparation of polyvinyl acetal resin)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Sekisui Chemical Co Ltd; JP 2006022160 A 2006 CAPLUS
- (2) Sumitomo Chemical Co Ltd; JP 2002069125 A 2002 CAPLUS
- (3) Sumitomo Chemical Co Ltd; JP 2002069127 A 2002 CAPLUS

L5 ANSWER 4 OF 428 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:830057 CAPLUS

DN 149:139714

ED Entered STN: 10 Jul 2008

TI Electrophotographic photoreceptor, process cartridge, and electrophotographic apparatus

IN Tanaka, Masato; Fujii, Atsushi; Ishizuka, Yuka; Endo, Takehiko; Nonaka, Masaki

PA Canon Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 28pp.  
CODEN: JKXXAF

DT Patent

LA Japanese

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008158003	A	20080710	JP 2006-343433	20061220
PRAI	JP 2006-343433		20061220		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008158003	IPCI	G03G005-05 [I,A]; G03G005-06 [I,A]
	FTERM	2H068/AA13; 2H068/AA19; 2H068/AA34; 2H068/AA35; 2H068/BA39; 2H068/BA49; 2H068/BA53; 2H068/BB16; 2H068/FA27

GI

AB Disclosed is an electrophotog. photoreceptor comprising a photosensitive layer on a support, wherein the photosensitive layer contains (a) Ga phthalocyanine crystal having strong peaks in  $7.4^{\circ}\pm0.3^{\circ}$  and  $28.2^{\circ}\pm0.3$ , (b) a polyvinylacetal resin represented by I ( $X_{11}$  = ethylene group, propylene group, etc.;  $R_{11-14}$  = H, alkyl, methoxy; and  $Ar_{11,12}$  = Ph group having  $\geq 1$  electron-donating group), and (c) an azo compound represented by II ( $Ar_{21,22}$  = aryl).

ST electrophotog photoreceptor process cartridge polyvinyacetal resin; gallium phthalocyanine crystal azo compd

IT Electrophotographic apparatus  
 Electrophotographic photoconductors (photoreceptors)  
 (Electrophotog. photoreceptor containing Ga phthalocyanine crystal, polyvinyl acetal resin, and azo compound)

IT Azo compounds  
 Polyvinyl acetals  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (Electrophotog. photoreceptor containing Ga phthalocyanine crystal, polyvinyl acetal resin, and azo compound)

IT 941688-46-6P 941688-49-9P 941688-53-5P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (Electrophotog. photoreceptor containing Ga phthalocyanine crystal, polyvinyl acetal resin, and azo compound)

IT 853308-27-7P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (Electrophotog. photoreceptor containing Ga phthalocyanine crystal, polyvinyl acetal resin, and azo compound)

IT 63371-84-6, Hydroxygallium phthalocyanine  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (Electrophotog. photoreceptor containing Ga phthalocyanine crystal, polyvinyl acetal resin, and azo compound)

IT 9002-89-5, Poval 1400 54120-50-2 941688-45-5 941688-48-8  
 941688-52-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (Electrophotog. photoreceptor containing Ga phthalocyanine crystal, polyvinyl acetal resin, and azo compound)

IT 1036718-37-2  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (Electrophotog. photoreceptor containing Ga phthalocyanine crystal, polyvinyl acetal resin, and azo compound)

L5 ANSWER 5 OF 428 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:769897 CAPLUS

DN 149:55302

ED Entered STN: 26 Jun 2008

TI Modified polyvinyl acetal resins and their coating, electrically conductive, and ceramic pastes

IN Ichitani, Motokuni

PA Sekisui Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13pp.

CODEN: JKXXAF

DT Patent

LA Japanese

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
PI JP 2008143922	A	20080626	JP 2006-328828	20061205
PRAI JP 2006-328828		20061205		

CLASS	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 2008143922	IPCI	C08F0008-28 [I,A]; C08F0008-00 [I,C*]; H01B0001-22 [I,A]; C09D0005-24 [I,A]; C09D0129-14 [I,A]; C09D0129-00 [I,C*]
		FTERM	4J038/CE061; 4J038/HA066; 4J038/HA186; 4J038/HA216; 4J038/HA316; 4J038/HA436; 4J038/HA466; 4J038/KA06; 4J038/NA20; 4J038/PB09; 4J100/AA02Q; 4J100/AA02R; 4J100/AD02S; 4J100/AF15T; 4J100/AF16T; 4J100/AG02P; 4J100/AG03P; 4J100/AG04P; 4J100/AG06P; 4J100/AJ02Q; 4J100/AJ09Q; 4J100/AJ10Q; 4J100/AK08S; 4J100/AK20S; 4J100/AK32Q; 4J100/AM02Q; 4J100/AM15Q; 4J100/BA03H; 4J100/BA03T; 4J100/BA16H; 4J100/BA16Q; 4J100/BC43T; 4J100/BC59H; 4J100/CA04; 4J100/CA05; 4J100/CA31; 4J100/DA30; 4J100/DA32; 4J100/DA33; 4J100/HA09; 4J100/HA43; 4J100/HB39; 4J100/HC17; 4J100/HC18; 4J100/HC19; 4J100/HC20; 4J100/HE12; 4J100/JA01; 4J100/JA44; 4J100/JA45; 5G301/DA03; 5G301/DA05; 5G301/DA06; 5G301/DA10; 5G301/DA11; 5G301/DA12; 5G301/DA42; 5G301/DD01
AB	The invention relates to title resins, useful for multilayer ceramic capacitors, with content of ethylene, pendant OH, and pendant CO <sub>2</sub> H, resp., 1-20, 15-40, and 0.01-10 mol% and degree of saponification and acetalization, resp., ≥80 and 40-80 mol% manufactured by acetalization of modified vinyl alc. polymers with aldehydes. Thus, a conductive paste containing a modified polyvinyl butyral manufactured from a saponified ethylene-vinyl acetate copolymer and a saponified itaconic acid-vinyl acetate copolymer showed good screen printability.		
ST	screen printability multilayer ceramic capacitor polyvinyl butyral; saponified ethylene vinyl acetate copolymer polyvinyl butyral; polyvinyl butyral saponified itaconic acid vinyl acetate copolymer		
IT	Electrically conductive pastes (modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)		
IT	Polyvinyl butyrals RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)		
IT	Aldehydes, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)		
IT	Ceramic capacitors (multilayer; modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)		
IT	Ceramic coatings Coating materials (pastes; modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)		
IT	24937-78-8DP, Ethylene-vinyl acetate copolymer, saponified, acetal with butyraldehyde 43158-52-7DP, Itaconic acid-vinyl acetate copolymer, saponified, acetal with butyraldehyde RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)		
IT	75-07-0, Acetaldehyde, reactions 123-72-8, Butyraldehyde RL: RCT (Reactant); RACT (Reactant or reagent) (modified polyvinyl butyral conductive and ceramic pastes for		

multilayer ceramic capacitors)

L5 ANSWER 6 OF 428 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2008:529942 CAPLUS  
DN 148:518375  
ED Entered STN: 02 May 2008  
TI Acrylic thermoplastic resin compositions with good toughness and strength  
for films and composites  
IN Tokuchi, Kazuki; Moriguchi, Nobuhiro; Kamata, Yohei; Komiya, Yukiatsu  
PA Kuraray Co., Ltd., Japan  
SO PCT Int. Appl., 68pp.  
CODEN: PIXXD2

DT Patent  
LA Japanese  
CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008050738	A1	20080502	WO 2007-JP70597	20071023
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2008133452	A	20080612	JP 2007-274550	20071023
PRAI	JP 2006-287745	A	20061023		
	JP 2007-81872	A	20070327		
	JP 2007-90863	A	20070330		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2008050738	IPCI	C08L0033-10 [I,A]; C08L0033-00 [I,C*]; B32B0027-30 [I,A]; C08J0005-18 [I,A]; C08L0029-14 [I,A]; C08L0029-00 [I,C*]
	JP 2008133452	IPCI	C08L0033-10 [I,A]; C08L0033-00 [I,C*]; C08L0029-14 [I,A]; C08L0029-00 [I,C*]; C08J0003-20 [I,A]; C08J0005-18 [I,A]; C08F0008-28 [I,A]; C08F0008-00 [I,C*]
		FTERM	4F070/AA25; 4F070/AA32; 4F070/AB11; 4F070/AB22; 4F070/AB23; 4F070/FA03; 4F070/FC06; 4F071/AA29; 4F071/AA33; 4F071/AA81; 4F071/AA86; 4F071/AF25Y; 4F071/AF30Y; 4F071/BA01; 4F071/BB05; 4F071/BC01; 4J002/BE06X; 4J002/BG05W; 4J100/AD02P; 4J100/AG04P; 4J100/CA31; 4J100/DA01; 4J100/DA25; 4J100/DA33; 4J100/GD11; 4J100/HA09; 4J100/HA19; 4J100/HA56; 4J100/HC16; 4J100/HC17; 4J100/HC18; 4J100/HC19; 4J100/HC20; 4J100/HE41; 4J100/HF00

AB Title compns. are prepared by blending a methacrylic resin and polyvinylacetal resin at  $\geq 140^\circ$  under shear rate  $\geq 100$  s<sup>-1</sup> and cooling to  $\leq 120^\circ$ , wherein at least the methacrylic resin constitute a continuous phase and the glass transition temperature ascribed to the methacrylic resin of the acrylic thermoplastic resin compns. is on between the glass transition temperature of the methacrylic resin alone and the glass transition temperature of the polyvinylacetal resin alone.

Thus, 90 parts a Me methacrylate-Me acrylate copolymer with glass transition temperature 121° and 10 parts a polyvinyl acetal resin obtained from polyvinyl alc. and butylaldehyde with glass transition temperature 78° were kneaded at 220° under maximum shear rate 300/s, extruded, and injection-molded to give a test piece, showing flexural modulus 3000 MPa, flexural elongation at yield 8.3%, flexural toughness 50 J, tensile modulus 2800 MPa, tensile elongation at break 25%, tensile toughness 50 J, surface hardness 88, haze 1.0%, and good moisture heat resistance and whitening resistance.

ST acrylic thermoplastic resin compn toughness strength film composite; methyl methacrylate methyl acrylate copolymer polyvinyl btanal blend

IT Polymer blends  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(acrylic polymer-polyvinyl acetal blends; acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

IT Extrusion of plastics and rubbers  
Laminated materials  
Laminated plastic films  
Plastic films  
(acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

IT Molded plastics, properties  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

IT Polyvinyl acetals  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(blend with acrylic polymer; acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

IT Acrylic polymers, preparation  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(blend with polyvinyl acetal; acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

IT Molding of plastics and rubbers  
(injection; acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

IT Metals, uses  
Oxides (inorganic), uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(lamine with acrylic resin composition film; acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

IT Plastics, properties  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(thermoplastics; acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

IT Plastics, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(thermosetting, laminate with acrylic resin composition articles; acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

IT 915977-69-4 1021686-60-1  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

IT 9002-89-5D, Polyvinyl alcohol, reaction products with aldehydes

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(blend with acrylic polymer; acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

IT 9011-87-4P, Methyl acrylate-methyl methacrylate copolymer  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(blend with polyvinyl acetal; acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

IT 7429-90-5, Aluminum, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(lamine with acrylic resin composition film; acrylic thermoplastic resin compns. with good toughness and strength for films and composites)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) E I Du Pont de Nemours & Co; EP 1565526 A1 2006 CAPLUS
- (2) E I Du Pont de Nemours & Co; CN 1717449 A 2006 CAPLUS
- (3) E I Du Pont de Nemours & Co; US 20040147675 A1 2006 CAPLUS
- (4) E I Du Pont de Nemours & Co; WO 2004050759 A1 2006 CAPLUS
- (5) E I Du Pont de Nemours & Co; US 20060036036 A1 2006 CAPLUS
- (6) E I Du Pont de Nemours & Co; JP 2006508232 A 2006
- (7) Kaneka Corp; JP 01-318059 A 1989 CAPLUS
- (8) Murata Mfg Co Ltd; JP 06-128022 A 1994 CAPLUS
- (9) Sony Corp; JP 08-197855 A 1996 CAPLUS

L5 ANSWER 7 OF 428 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:26441 CAPLUS

DN 148:286258

ED Entered STN: 08 Jan 2008

TI Binder composition for copper foil adhesion sheet used in printed circuit board

IN Sim, Hui Yong; Jung, U. Jae; Kwon, Yun Gyeong; Ahn, Heung Geun; Min, Hyeon Seong

PA LG Chem, Ltd., S. Korea

SO Repub. Korean Kongkae Taeho Kongbo, 17pp.  
CODEN: KRXXA7

DT Patent

LA Korean

CC 38-3 (Plastics Fabrication and Uses)  
Section cross-reference(s): 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	KR 2007115272	A	20071206	KR 2006-49461	20060601
PRAI	KR 2006-49461		20060601		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
KR 2007115272	IPCI	C09J0163-00 [I,A]; C09J0109-02 [I,A]; C09J0109-00 [I,C*]

AB The title binder composition comprises (by weight parts): halogen-free bisphenol-A epoxy resin (average epoxy equivalent = 300-1,000) 100, curing agent 0.5-5, reactive or non-reactive polyvinyl acetal resin (weight average mol. weight = 100,000-300,000) 10-30, and reactive or non-reactive butadiene acrylonitrile copolymer resin (weight average mol. weight =

10,000-400,000) 10-40. The halogen-free bisphenol-A epoxy resin contains 0.5-4wt.5 of phosphorus, and has more than 4 functional groups. The copper foil adhesion sheet using the binder composition has the advantages of high tensile strength, high ductility, high elongation rate, high flame

retardancy, high heat resistance, and no generation of cancerogenic substances such as dioxin when abandoned.

ST binder compn copper foil adhesion sheet printed circuit board

IT Binders

Crosslinking agents

Foils

Printed circuit boards

(binder composition for copper foil adhesion sheet used in printed circuit board)

IT Epoxy resins, uses

Polyvinyl acetals

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(binder composition for copper foil adhesion sheet used in printed circuit board)

IT 7723-14-0D, Phosphorus, compds.

RL: MOA (Modifier or additive use); USES (Uses)

(binder composition for copper foil adhesion sheet used in printed circuit board)

IT 9003-18-3, Acrylonitrile-butadiene copolymer

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(binder composition for copper foil adhesion sheet used in printed circuit board)

IT 7440-50-8, Copper, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(binder composition for copper foil adhesion sheet used in printed circuit board)

L5 ANSWER 8 OF 428 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:1420375 CAPLUS

DN 148:59769

ED Entered STN: 13 Dec 2007

TI Interlayer for laminated glass and laminated glass

IN Marumoto, Tadashi

PA Sekisui Chemical Co., Ltd., Japan

SO PCT Int. Appl., 20pp.

CODEN: PIXXD2

DT Patent

LA Japanese

CC 57-1 (Ceramics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007142095	A1	20071213	WO 2007-JP60982	20070530
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRAI JP 2006-151096 A 20060531

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2007142095	IPCI	C03C0027-12 [I,A]; B32B0017-10 [I,A]; B32B0017-06

[I,C\*]; C08J0005-18 [I,A]; C08K0005-103 [I,A];  
C08K0005-00 [I,C\*]; C08L0029-14 [I,A]; C08L0029-00  
[I,C\*]

IPCR C03C0027-12 [I,C]; C03C0027-12 [I,A]; B32B0017-06  
[I,C]; B32B0017-10 [I,A]; C08J0005-18 [I,C];  
C08J0005-18 [I,A]; C08K0005-00 [I,C]; C08K0005-103  
[I,A]; C08L0029-00 [I,C]; C08L0029-14 [I,A]

ECLA C03C027/10; C03C017/32C

OS MARPAT 148:59769

AB Disclosed is an interlayer for laminated glasses, which contains a polyvinyl acetal resin. This interlayer can be easily adhered to a glass and enables to form a laminated glass having excellent transparency. Also disclosed is a laminated glass using such an interlayer. Specifically disclosed is an interlayer for laminated glasses containing 100 weight parts of a polyvinyl acetal resin and 60-100 weight parts of a plasticizer, wherein 50-100% by weight of the plasticizer is composed of a diester compound represented by the formula R1C(=O)(R3O)NC(=O)R2, wherein R1 and R2 independently represent an organic group having 5-10 C atoms; R3 represents a -CH2-CH2- group, a -CH2-CHMe- group, a -CH2-CH2-CH2- group or a -CH2-CH2-CH2-CH2- group; and n represents an integer of 4-10.

ST laminated glass interlayer polyvinyl acetal diester plasticizer

IT Laminated glass  
RL: PEP (Physical, engineering or chemical process); PRP (Properties);  
PROC (Process)  
(interlayer containing polyvinyl acetal diester plasticizer for laminated glass and laminated glass)

IT Polyvinyl acetals  
RL: TEM (Technical or engineered material use); USES (Uses)  
(interlayer containing polyvinyl acetal diester plasticizer for laminated glass and laminated glass)

IT 94-28-0 9004-93-7 18268-70-7 150883-14-0 959851-23-1  
RL: TEM (Technical or engineered material use); USES (Uses)  
(interlayer containing polyvinyl acetal diester plasticizer for laminated glass and laminated glass)

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Kuraray Co Ltd; EP 1384731 A1 2004 CAPLUS  
(2) Kuraray Co Ltd; JP 200468013 A 2004  
(3) Kuraray Co Ltd; DE 60302726 A 2004  
(4) Kuraray Co Ltd; US 6992130 B2 2004 CAPLUS  
(5) Kureha Chemical Industry Co Ltd; WO 2005111170 A1 2005 CAPLUS  
(6) Sekisui Chemical Co Ltd; JP 2001163640 A 2001 CAPLUS  
(7) Sekisui Chemical Co Ltd; EP 1657092 A1 2005 CAPLUS  
(8) Sekisui Chemical Co Ltd; WO 200518969 A1 2005  
(9) Sekisui Chemical Co Ltd; JP 2005206445 A 2005 CAPLUS  
(10) Sekisui Chemical Co Ltd; US 20068658 A 2005  
(11) Sekisui Chemical Co Ltd; CA 2532029 A 2005 CAPLUS

L5 ANSWER 9 OF 428 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:1331343 CAPLUS  
DN 147:531632  
ED Entered STN: 22 Nov 2007  
TI Liquid crystal panel and liquid crystal display unit  
IN Iida, Toshiyuki; Izaki, Akinori; Sugihara, Hisae; Ohmori, Yutaka  
PA Nitto Denko Corporation, Japan  
SO PCT Int. Appl., 58pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38, 73

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007132618	A1	20071122	WO 2007-JP58305	20070417
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2007328324	A	20071220	JP 2007-103571	20070411
PRAI	JP 2006-132418	A	20060511		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2007132618	IPCI	G02F0001-13363 [I,A]; C08F0008-28 [I,A]; C08F0008-48 [I,A]; C08F0008-00 [I,C*]; G02B0005-30 [I,A]; G02F0001-1335 [I,A]; G02F0001-13 [I,C*]
		IPCR	G02F0001-13 [I,C]; G02F0001-13363 [I,A]; C08F0008-00 [I,C]; C08F0008-28 [I,A]; C08F0008-48 [I,A]; G02B0005-30 [I,C]; G02B0005-30 [I,A]; G02F0001-1335 [I,A]
	JP 2007328324	IPCI	G02F0001-13363 [I,A]; G02F0001-139 [I,A]; G02F0001-1335 [I,A]; G02F0001-13 [I,C*]; G02B0005-30 [I,A]
		IPCR	G02F0001-13 [I,C]; G02F0001-13363 [I,A]; G02B0005-30 [I,C]; G02B0005-30 [I,A]; G02F0001-1335 [I,A]; G02F0001-139 [I,A]
		FTERM	2H049/BA02; 2H049/BA06; 2H049/BA42; 2H049/BB03; 2H049/BB42; 2H049/BC12; 2H049/BC22; 2H088/GA02; 2H088/HA16; 2H088/HA18; 2H088/JA10; 2H088/KA05; 2H088/KA07; 2H088/KA29; 2H088/MA07; 2H091/FA08X; 2H091/FA08Z; 2H091/FA11X; 2H091/FA11Z; 2H091/FB02; 2H091/FC07; 2H091/FC12; 2H091/FC22; 2H091/FD10; 2H091/GA16; 2H091/GA17; 2H091/HA09; 2H091/KA02; 2H091/LA19; 2H091/LA20

AB A liquid crystal panel small in oblique-direction color shift even viewed from any directions through 360°, and wide in right and left viewing angles. The liquid crystal panel comprises a liquid crystal cell, a first polarizer disposed on one side of the liquid crystal cell, a second polarizer disposed on the other side of the liquid crystal cell, and first optical compensation layer and a second compensation layer disposed between the first polarizer and the second polarizer. The first optical compensation layer is disposed between the first polarizer and the liquid crystal cell, with its lagging phase direction substantially orthogonal to the absorption axis direction of the first polarizer and its index ellipsoid showing  $nx > ny \geq nz$ . The first optical compensation layer contains polyvinyl acetal resin, and includes a phase difference film where  $Re[750]$  is larger than  $Re[550]$ . The second optical compensation layer is disposed between the first optical compensation layer and the second polarizer, with its index ellipsoid showing  $nx=ny>nz$ .

ST liq crystal panel display polarizer LCD; polyvinyl acetal optical compensating film

IT Liquid crystal displays  
Optical films

Polarizers

(LCD optical compensating film made from polyvinyl acetal)

IT Polyvinyl acetals

RL: TEM (Technical or engineered material use); USES (Uses)

(LCD optical compensating film made from polyvinyl acetal)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Fujitsu Display Technologies Corp; US 20060012738 A1 2006 CAPLUS
- (2) Fujitsu Display Technologies Corp; JP 200630688 A 2006
- (3) Lg Chem Ltd; EP 1588211 A1 2004 CAPLUS
- (4) Lg Chem Ltd; WO 2004068225 A1 2004 CAPLUS
- (5) Lg Chem Ltd; US 20060244884 A1 2004
- (6) Lg Chem Ltd; JP 2006514754 A 2004
- (7) Nitto Denko Corp; JP 200689696 A 2006
- (8) Teijin Ltd; WO 03032060 A1 2003 CAPLUS
- (9) Teijin Ltd; EP 1435541 A1 2003
- (10) Teijin Ltd; US 20040239852 A1 2003 CAPLUS

L5 ANSWER 10 OF 428 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:1278465 CAPLUS

DN 147:503571

ED Entered STN: 09 Nov 2007

TI Polyvinyl acetal resin-containing intermediate film for laminated glass and laminated glass

IN Marumoto, Tadashi

PA Sekisui Chemical Co., Ltd., Japan

SO PCT Int. Appl., 23pp.

CODEN: PIXXD2

DT Patent

LA Japanese

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 57

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007125868	A1	20071108	WO 2007-JP58742	20070423
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRAI JP 2006-120685 A 20060425

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2007125868	IPCI	C03C0027-12 [I,A]; B32B0017-10 [I,A]; B32B0017-06 [I,C*]
	IPCR	C03C0027-12 [I,C]; C03C0027-12 [I,A]; B32B0017-06 [I,C]; B32B0017-10 [I,A]

OS MARPAT 147:503571

AB The intermediate film for laminated glasses contains a polyvinyl acetal resin. The intermediate film can be easily bonded to a glass and enables to give a laminated glass having good transparency. Specifically, an intermediate film for laminated glasses contains 100 parts a polyvinyl acetal resin

and 40-75 parts plasticizer. In this intermediate film, 4-40% of the plasticizer is composed of an C16-20 unsatd. fatty acid alkyl ester.

ST polyvinyl acetal intermediate film laminated glass

IT Plastic films

    Plasticizers

        (polyvinyl acetal resin-containing intermediate film for laminated glass)

IT Extruded plastics

    Plate glass

        RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

        (polyvinyl acetal resin-containing intermediate film for laminated glass)

IT Polyvinyl acetals

        RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

        (polyvinyl acetal resin-containing intermediate film for laminated glass)

IT Polyvinyl butyrals

        RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

        (polyvinyl acetal resin-containing intermediate film for laminated glass)

IT Laminated glass

        RL: TEM (Technical or engineered material use); USES (Uses)

        (polyvinyl acetal resin-containing intermediate film for laminated glass)

IT Fatty acids, uses

        RL: MOA (Modifier or additive use); USES (Uses)

        (unsatd., esters, plasticizer; polyvinyl acetal resin-containing intermediate film for laminated glass)

IT 112-80-1D, Oleic acid, alkyl esters 141-24-2, Methyl ricinoleate

18268-70-7, Tetraethylene glycol di-2-ethylhexanoate

        RL: MOA (Modifier or additive use); USES (Uses)

        (plasticizer; polyvinyl acetal resin-containing intermediate film for laminated glass)

IT 915977-69-4

        RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

        (polyvinyl acetal resin-containing intermediate film for laminated glass)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Asahi Glass Co Ltd; WO 2001042158 A1 2001
- (2) Asahi Glass Co Ltd; JP 2001233643 A 2001 CAPLUS
- (3) Nippon Shokubai Co Ltd; JP 10-338521 A 1998 CAPLUS
- (4) Nippon Shokubai Co Ltd; JP 2000281934 A 2000 CAPLUS
- (5) The Yokohama Rubber Co Ltd; JP 2005281074 A 2005 CAPLUS

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E1	3	ICHITANI MASAMI/AU
E2	2	ICHITANI MAYUMI/AU
E3	0 -->	ICHITANI MOTO/AU
E4	51	ICHITANI MOTOKUNI/AU
E5	1	ICHITANI N/AU
E6	12	ICHITANI NOBORU/AU
E7	1	ICHITANI NOBUYA/AU
E8	4	ICHITANI RIE/AU
E9	1	ICHITANI RUMIKO/AU
E10	1	ICHITANI SHUJI/AU
E11	1	ICHITANI SYUJI/AU

E12 1 ICHITANI T/AU

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L6 51 "ICHITANI MOTOKUNI"/AU

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(FILE 'HOME' ENTERED AT 10:55:14 ON 22 SEP 2008)

FILE 'CAPLUS' ENTERED AT 10:55:43 ON 22 SEP 2008  
E US2006192180/PN  
E US20060192180/PN

L1 1 S E3

FILE 'REGISTRY' ENTERED AT 10:58:28 ON 22 SEP 2008

L2 1 S 7440-02-0/RN  
L3 1 S 12047-27-7/RN  
L4 1 S 24937-78-8/RN

FILE 'CAPLUS' ENTERED AT 11:02:01 ON 22 SEP 2008

L5 428 S POLYVINYL ACETAL RESIN#  
E ICHITANI MOTO/AU  
L6 51 S E4

=> s 15 and 16

L7 6 L5 AND L6

=> d 1-6 all

L7 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2008:769897 CAPLUS  
DN 149:55302  
ED Entered STN: 26 Jun 2008  
TI Modified polyvinyl acetal resins and their  
coating, electrically conductive, and ceramic pastes  
IN Ichitani, Motokuni  
PA Sekisui Chemical Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 13pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
CC 38-3 (Plastics Fabrication and Uses)  
Section cross-reference(s): 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008143922	A	20080626	JP 2006-328828	20061205
PRAI	JP 2006-328828		20061205		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008143922	IPCI	C08F0008-28 [I,A]; C08F0008-00 [I,C*]; H01B0001-22 [I,A]; C09D0005-24 [I,A]; C09D0129-14 [I,A]; C09D0129-00 [I,C*]
	FTERM	4J038/CE061; 4J038/HA066; 4J038/HA186; 4J038/HA216; 4J038/HA316; 4J038/HA436; 4J038/HA466; 4J038/KA06; 4J038/NA20; 4J038/PB09; 4J100/AA02Q; 4J100/AA02R; 4J100/AD02S; 4J100/AF15T; 4J100/AF16T; 4J100/AG02P; 4J100/AG03P; 4J100/AG04P; 4J100/AG06P; 4J100/AJ02Q; 4J100/AJ09Q; 4J100/AJ10Q; 4J100/AK08S; 4J100/AK20S; 4J100/AK32Q; 4J100/AM02Q; 4J100/AM15Q; 4J100/BA03H; 4J100/BA03T; 4J100/BA16H; 4J100/BA16Q; 4J100/BC43T;

4J100/BC59H; 4J100/CA04; 4J100/CA05; 4J100/CA31;  
4J100/DA30; 4J100/DA32; 4J100/DA33; 4J100/HA09;  
4J100/HA43; 4J100/HB39; 4J100/HC17; 4J100/HC18;  
4J100/HC19; 4J100/HC20; 4J100/HE12; 4J100/JA01;  
4J100/JA44; 4J100/JA45; 5G301/DA03; 5G301/DA05;  
5G301/DA06; 5G301/DA10; 5G301/DA11; 5G301/DA12;  
5G301/DA42; 5G301/DD01

AB The invention relates to title resins, useful for multilayer ceramic capacitors, with content of ethylene, pendant OH, and pendant CO<sub>2</sub>H, resp., 1-20, 15-40, and 0.01-10 mol% and degree of saponification and acetalization, resp., ≥80 and 40-80 mol% manufactured by acetalization of modified vinyl alc. polymers with aldehydes. Thus, a conductive paste containing a modified polyvinyl butyral manufactured from a saponified ethylene-vinyl acetate copolymer and a saponified itaconic acid-vinyl acetate copolymer showed good screen printability.

ST screen printability multilayer ceramic capacitor polyvinyl butyral; saponified ethylene vinyl acetate copolymer polyvinyl butyral; polyvinyl butyral saponified itaconic acid vinyl acetate copolymer

IT Electrically conductive pastes  
(modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT Polyvinyl butyral  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT Aldehydes, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT Ceramic capacitors  
(multilayer; modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT Ceramic coatings  
Coating materials  
(pastes; modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT 24937-78-8DP, Ethylene-vinyl acetate copolymer, saponified, acetal with butyraldehyde 43158-52-7DP, Itaconic acid-vinyl acetate copolymer, saponified, acetal with butyraldehyde  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT 75-07-0, Acetaldehyde, reactions 123-72-8, Butyraldehyde  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

L7 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:1089165 CAPLUS

DN 145:442632

ED Entered STN: 19 Oct 2006

TI Ceramic pastes for ceramic green sheets for capacitors

IN Ichitani, Motokuni

PA Sekisui Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8pp.

CODEN: JKXXAF

DT Patent

LA Japanese

CC 57-2 (Ceramics)

Section cross-reference(s): 38, 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006282490	A	20061019	JP 2005-108519	20050405
PRAI	JP 2005-108519		20050405		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 2006282490	IPCI	C04B0035-632 [I,A]; C04B0035-63 [I,C*]; B28B0001-30 [I,A]; H01G0004-12 [I,A]
		IPCR	C04B0035-63 [I,C]; C04B0035-632 [I,A]; B28B0001-30 [I,C]; B28B0001-30 [I,A]; H01G0004-12 [I,C]; H01G0004-12 [I,A]
		FTERM	4G030/AA07; 4G030/AA10; 4G030/AA16; 4G030/AA17; 4G030/AA32; 4G030/AA36; 4G030/AA47; 4G030/AA48; 4G030/AA51; 4G030/AA52; 4G030/BA18; 4G030/CA07; 4G030/CA08; 4G030/GA14; 4G030/GA17; 4G030/GA18; 4G030/PA21; 4G052/DA05; 4G052/DA08; 4G052/DB01; 5E001/AB03; 5E001/AH01; 5E001/AJ02

AB The pastes contain polyvinyl acetal resin with desired acetalization degree, organic solvent and ceramic powder. Preferably, the polyvinyl acetal resin has acetalization degree 40-80%.

ST ceramic paste polyvinyl acetal resin green sheet capacitor

IT Polyvinyl acetals

RL: NUU (Other use, unclassified); USES (Uses)  
(ceramic pastes containing; ceramic pastes for ceramic green sheets for capacitors)

IT Acetalization

Ceramic capacitors

Ceramics

(ceramic pastes for ceramic green sheets for capacitors)

L7 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:101214 CAPLUS

DN 144:193288

ED Entered STN: 03 Feb 2006

TI Ceramic pastes, electrically conductive pastes and dielectric pastes

IN Ichitani, Motokuni; Ochitani, Yukio

PA Sekisui Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

CC 38-3 (Plastics Fabrication and Uses)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006027990	A	20060202	JP 2004-213479	20040721
PRAI	JP 2004-213479		20040721		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 2006027990	IPCI	C04B0035-632 [I,A]; C04B0035-63 [I,C*]; H01B0001-22 [I,A]; H01B0003-00 [I,A]; C04B0035-00 [I,A]
		FTERM	4G030/AA10; 4G030/AA16; 4G030/BA09; 4G030/GA14; 4G030/GA15; 4G030/PA22; 5G301/DA02; 5G301/DA03; 5G301/DA04; 5G301/DA05; 5G301/DA33; 5G301/DA34; 5G301/DA42; 5G301/DD01; 5G303/AA05; 5G303/AB20; 5G303/BA07; 5G303/CA01; 5G303/CA02; 5G303/CA03;

OS MARPAT 144:193288

AB The title pastes contain polyvinyl acetal resins, plasticizers and  $\geq 5$  volume% inorg. powder where the plasticizers are obtained from  $R1C(:O)O(XO)nC(:O)R2$  ( $X = C1-6$  linear or branched alkylene group;  $R1, R2 = C1-20$  linear, branched or cyclic alkyl group;  $n = 1-5$ ) for improving the health safety of products without compromising their quality. Thus, mixing a 15% ethanol solution of BM-SZ (polyvinyl acetal) with 30 parts per 100 parts BM-SZ of diethylene glycol dinonanoate (I), casting the resulting mixture into sheet and heating at  $60^\circ$  or  $140^\circ$  for 20 min gave a sheet with heat flow temperature  $90^\circ$  or  $99^\circ$ , resp., vs.  $142^\circ$  and  $142^\circ$ , resp. in the absence of I. A ceramic paste was prepared by using the resin and plasticizer above and a ceramic powder.

ST conductive dielec ceramic paste manuf polyalkylene glycol diacylate plasticizer

IT Polyvinyl acetals  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (BM-SZ; safe plasticizers for manufacture of ceramic pastes, elec. conductive pastes and dielec. pastes)

IT Pastes  
 (dielec.; safe plasticizers for manufacture of ceramic pastes, elec. conductive pastes and dielec. pastes)

IT Ceramics  
 (pastes containing; safe plasticizers for manufacture of ceramic pastes, elec.  
 conductive pastes and dielec. pastes)

IT Electric insulators  
 (pastes; safe plasticizers for manufacture of ceramic pastes, elec.  
 conductive pastes and dielec. pastes)

IT Electrically conductive pastes  
 Pastes  
 Plasticizers  
 (safe plasticizers for manufacture of ceramic pastes, elec. conductive pastes and dielec. pastes)

IT 106-01-4, Diethylene glycol dinonanoate 7434-40-4, Triethylene glycol diheptanoate 7735-24-2 41395-83-9 874909-90-7 874985-14-5, Butylene glycol di(3-ethylheptanoate)  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (plasticizer; safe plasticizers for manufacture of ceramic pastes, elec.  
 conductive pastes and dielec. pastes)

L7 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:100988 CAPLUS  
 DN 144:180710  
 ED Entered STN: 03 Feb 2006  
 TI Polyacetal resin as a binder resin in photosensitive layer of heat-developable photographic films  
 IN Ichitani, Motokuni; Ochitani, Yukio; Takehara, Hiroaki  
 PA Sekisui Chemical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 38  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 2006030959	A	20060202	JP 2005-116184	20050413

PRAI JP 2004-178717 A 20040616

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006030959	IPCI	G03C0001-498 [I,A]; C08F0008-48 [I,A]; C08F0008-00 [I,C*]
	FTERM	2H123/AB00; 2H123/AB03; 2H123/AB23; 2H123/BA00; 2H123/BA14; 2H123/BB00; 2H123/BB39; 2H123/CB00; 2H123/CB03; 4J100/AD02P; 4J100/AF15P; 4J100/HC16; 4J100/HC18; 4J100/HC19; 4J100/JA38

AB The title acetal is used as ≤400 mesh particles, wherein the extracted surface water from a particle solution, which is prepared by putting the particles in 10 times weight of distilled water, stirring the solution with 40 rpm at 20° C for 20 h; and standing the solution for one hour, has 5.0-8.5 pH. The resin provides improved storageability as well as good image quality.

ST polyacetal resin binder photosensitive layer heat developable photog film  
IT Photographic films

(heat-developable; polyvinyl acetal resin  
as binder resin in photosensitive layer of heat-developable photog. films)

IT Polyoxymethylenes, preparation

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyvinyl acetal resin as binder resin  
in photosensitive layer of heat-developable photog. films)

IT 75-07-0DP, Acetaldehyde, reaction product with poly(vinyl alc.)  
123-72-8DP, Butyl aldehyde, reaction product with poly(vinyl alc.)  
9002-89-5DP, Poly(vinyl alcohol), reaction product with aldehydes  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyvinyl acetal resin as binder resin  
in photosensitive layer of heat-developable photog. films)

L7 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:1240723 CAPLUS

DN 143:478678

ED Entered STN: 24 Nov 2005

TI Poly(vinyl acetal) resins for slurry compositions, conductive pastes, ceramic condensers, and photographic materials and their manufacture

IN Ichitani, Motokuni; Ochitani, Yukio

PA Sekisui Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F016-38

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 57, 74, 76

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005325342	A	20051124	JP 2005-113707	20050411
PRAI JP 2004-117061	A	20040412		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2005325342	ICM	C08F016-38
	IPCI	C08F0016-38 [ICM, 7]; C08F0016-00 [ICM, 7,C*]
	FTERM	4J100/AF15P; 4J100/CA01; 4J100/CA03; 4J100/DA33; 4J100/DA39; 4J100/HA43; 4J100/HA61; 4J100/HB25;

4J100/HB52; 4J100/HC16; 4J100/HC17; 4J100/HE05;  
4J100/HE32; 4J100/JA37; 4J100/JA45

AB Title resins prepared from poly(vinyl alc.) (I) and acetals show a decrease of filtration flow rate (R) of <10% at 25° and 10-mmHg filtration pressure by 5% the resin solution (in MEK and in 1:1 PhMe/EtOH blend) and 5- $\mu$ m filters. An aqueous solution of 7% I (with saponified degree 85 mol%, d.p.) 103) was stirred at 90° for 2 h, cooled to room temperature, left for overnight to form a solution with no viscosity increase, which was reacted with butyraldehyde to form a polyvinyl butyral showing R in MEK of 94% and R in 1:1 PhMe/EtOH blend of 96%.

ST polyvinyl acetal org soln shortened filtration process; ceramic condenser polyvinyl acetal slurry compn; elec conductive paste polyvinyl acetal manuf; heat developable photog material polyvinyl acetal emulsion

IT Photographic emulsions  
(heat-developable; manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT Capacitors  
(laminated ceramic sheets for; manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT Filtration  
(manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT Polyvinyl acetals  
Polyvinyl butyrals  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT 9002-89-5, Poly(vinyl alcohol)  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(controlled saponified degree; manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT 108-88-3, Toluene, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
(ethanol blends; manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT 78-93-3, Methyl ethyl ketone, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
(manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT 64-17-5, Ethanol, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
(toluene blend; manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

L7 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:74133 CAPLUS  
DN 142:156879  
ED Entered STN: 28 Jan 2005  
TI Modified polyvinyl acetal binder resin for coating paste with good applicability  
IN Ichitani, Motokuni; Ii, Daizo; Ochitani, Yukio; Takahashi, Hideyuki; Sakashita, Katsuaki

PA Sekisui Chemical Co., Ltd., Japan  
 SO PCT Int. Appl., 39 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 IC ICM C08F008-48  
 ICS C09D129-14  
 CC 37-3 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 38, 74, 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005007710	A1	20050127	WO 2004-JP9127	20040628
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2005089695	A	20050407	JP 2003-328162	20030919
	JP 2005268055	A	20050929	JP 2004-79082	20040318
	JP 2005303008	A	20051027	JP 2004-117062	20040412
	JP 2005298792	A	20051027	JP 2004-190354	20040628
	JP 4146823	B2	20080910		
	EP 1637546	A1	20060322	EP 2004-746596	20040628
	R: BE, DE, FR, GB, IT				
CN 1809598	A	20060726	CN 2004-80017415	20040628	
JP 2005298793	A	20051027	JP 2004-233469	20040810	
JP 2005113133	A	20050428	JP 2004-270142	20040916	
US 20060192180	A1	20060831	US 2005-561971	20051222	
PRAI	JP 2003-183187	A	20030626		
	JP 2003-328162	A	20030919		
	JP 2003-328163	A	20030919		
	JP 2004-79082	A	20040318		
	JP 2004-79083	A	20040318		
	JP 2004-117062	A	20040412		
WO 2004-JP9127	W	20040628			

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP	JP 2005089695	ICM	C08F008-48
		ICS	C09D129-14
		IPCI	C08F008-48 [ICM, 7]; C08F008-00 [ICM, 7, C*]; C09D0129-14 [ICS, 7]; C09D0129-00 [ICS, 7, C*]
		IPCR	C08F008-00 [I, C*]; C08F008-28 [I, A]; C08F008-48 [I, A]; C09D0129-00 [I, C*]; C09D0129-14 [I, A]
		ECLA	C08F008/28+216/06
		IPCI	C08F008-28 [ICM, 7]; C08F008-00 [ICM, 7, C*]; C03C0008-16 [ICS, 7]; C03C0008-00 [ICS, 7, C*]; C08F0016-06 [ICS, 7]; C08F0016-00 [ICS, 7, C*]; C08K0003-40 [ICS, 7]; C08K0003-00 [ICS, 7, C*]; C08L0029-14 [ICS, 7]; C08L0029-00 [ICS, 7, C*]; C09J0129-14 [ICS, 7]; C09J0129-00 [ICS, 7, C*]; H01J0011-02 [ICS, 7]
		IPCR	C03C0008-00 [I, C*]; C03C0008-16 [I, A]; C08F0008-00 [I, C*]; C08F0008-28 [I, A]; C08F0016-00 [I, C*]; C08F0016-06 [I, A]; C08K0003-00 [I, C*]; C08K0003-40

			[I,A]; C08L0029-00 [I,C*]; C08L0029-14 [I,A]; C09J0129-00 [I,C*]; C09J0129-14 [I,A]; H01J0011-02 [I,A]; H01J0011-02 [I,C*]
		FTERM	4G062/AA09; 4G062/BB01; 4G062/MM23; 4G062/NN32; 4G062/PP14; 4J002/BE031; 4J002/DL006; 4J002/GJ01; 4J040/DD071; 4J040/HA346; 4J040/JA05; 4J040/KA03; 4J040/KA23; 4J040/LA06; 4J040/LA07; 4J040/MA05; 4J040/NA19; 4J100/AA02Q; 4J100/AD02S; 4J100/AF15R; 4J100/AG04P; 4J100/BA03H; 4J100/BC59H; 4J100/CA31; 4J100/HA09; 4J100/HA43; 4J100/HC18; 4J100/HC19; 4J100/JA03; 5C040/GF18; 5C040/KA07; 5C040/KA08
JP 2005268055	IPCI		H01B0001-22 [ICM,7]; H05K0003-12 [ICS,7]; H01G0004-12 [ICS,7]
	IPCR		H01B0001-22 [I,A]; H01B0001-22 [I,C*]; H01G0004-12 [N,A]; H01G0004-12 [N,C*]; H05K0003-12 [I,A]; H05K0003-12 [I,C*]
	FTERM		5E001/AB03; 5E001/AC09; 5E001/AH01; 5E001/AJ01; 5E343/AA23; 5E343/BB23; 5E343/BB24; 5E343/BB25; 5E343/BB44; 5E343/BB48; 5E343/BB49; 5E343/BB76; 5E343/DD03; 5E343/DD64; 5E343/FF02; 5E343/FF11; 5E343/GG02; 5E343/GG08; 5G301/DA10; 5G301/DA42; 5G301/DD01
JP 2005303008	IPCI		H01G0004-12 [ICM,7]; B28B0001-30 [ICS,7]; C04B0035-00 [ICS,7]; C04B0035-632 [ICS,7]; C04B0035-63 [ICS,7,C*]; B28B0011-00 [ICS,7]
	IPCR		B28B0001-30 [I,A]; B28B0001-30 [I,C*]; B28B0011-00 [N,A]; B28B0011-00 [N,C*]; C04B0035-00 [I,A]; C04B0035-00 [I,C*]; C04B0035-63 [I,C*]; C04B0035-632 [I,A]; H01G0004-12 [I,A]; H01G0004-12 [I,C*]
	FTERM		4G030/AA07; 4G030/AA10; 4G030/AA16; 4G030/AA17; 4G030/AA32; 4G030/AA36; 4G030/AA37; 4G030/AA47; 4G030/AA51; 4G030/AA52; 4G030/BA09; 4G030/GA14; 4G030/GA17; 4G030/PA11; 4G030/PA21; 4G052/DA05; 4G052/DA08; 4G052/DB12; 4G052/DC06; 4G055/AA08; 4G055/AA10; 4G055/AC01; 4G055/AC09; 4G055/BA22; 4G055/BA35; 4G055/BA43; 5E001/AB06; 5E001/AH01; 5E001/AJ02
JP 2005298792	IPCI		H01B0001-22 [I,A]; C08F0216-38 [I,A]; C08F0216-00 [I,C*]; C08L0029-14 [I,A]; C08L0029-00 [I,C*]; C08K0003-00 [I,A]; C08K0005-00 [I,A]
	IPCR		C08F0216-00 [I,C*]; C08F0216-38 [I,A]; C08K0003-00 [I,A]; C08K0003-00 [I,C*]; C08K0005-00 [I,A]; C08K0005-00 [I,C*]; C08L0029-00 [I,C*]; C08L0029-14 [I,A]; H01B0001-22 [I,A]; H01B0001-22 [I,C*]; H01G0004-12 [N,A]; H01G0004-12 [N,C*]; H01G0004-30 [N,A]; H01G0004-30 [N,C*]
	FTERM		4J002/BE061; 4J002/DA076; 4J002/DA106; 4J002/DA116; 4J002/EF027; 4J002/EF037; 4J002/EF057; 4J002/EH158; 4J002/EN027; 4J002/FD116; 4J002/GQ02; 4J002/HA08; 4J100/AA00S; 4J100/AA01S; 4J100/AA02S; 4J100/AA03S; 4J100/AD02Q; 4J100/AF15P; 4J100/AG02R; 4J100/AG03R; 4J100/AG04R; 4J100/CA06; 4J100/JA45; 5E001/AB03; 5E001/AC09; 5E001/AH01; 5E001/AJ01; 5E082/AA01; 5E082/AB03; 5E082/BC32; 5E082/BC33; 5E082/BC40; 5E082/EE04; 5E082/EE23; 5E082/EE35; 5E082/FF05; 5E082/FG04; 5E082/FG26; 5E082/FG46; 5E082/FG54; 5E082/KK01; 5E082/LL02; 5E082/MM22; 5E082/MM24; 5E082/PP03; 5G301/DA10; 5G301/DA42; 5G301/DD01
EP 1637546	IPCI		C08F0008-48 [ICM,7]; C08F0008-00 [ICM,7,C*]; C09D0129-14 [ICS,7]; C09D0129-00 [ICS,7,C*]
	IPCR		C08F0008-00 [I,C*]; C08F0008-28 [I,A]; C08F0008-48 [I,A]; C09D0129-00 [I,C*]; C09D0129-14 [I,A]

		ECLA	C08F008/28+216/06
CN 1809598		IPCI	C08F0008-48 [I,A]; C08F0008-00 [I,C*]; C09D0129-14 [I,A]; C09D0129-00 [I,C*]
JP 2005298793		IPCI	C08L0029-14 [ICM,7]; C08L0029-00 [ICM,7,C*]; C08F0016-38 [ICS,7]; C08F0016-00 [ICS,7,C*]; C08K0005-04 [ICS,7]; C08K0005-00 [ICS,7,C*]
		IPCR	C08F0016-00 [I,C*]; C08F0016-38 [I,A]; C08K0005-00 [I,C*]; C08K0005-04 [I,A]; C08L0029-00 [I,C*]; C08L0029-14 [I,A]
		FTERM	4J002/BE061; 4J002/CH052; 4J002/DA076; 4J002/DA086; 4J002/DB006; 4J002/EF037; 4J002/EF058; 4J002/EG037; 4J002/EH057; 4J002/EH157; 4J002/EN028; 4J002/EP018; 4J002/FD116; 4J002/GQ02; 4J100/AA02Q; 4J100/AD02P; 4J100/AF15P; 4J100/BA10H; 4J100/CA06; 4J100/CA31; 4J100/HA09; 4J100/HA56; 4J100/HA61; 4J100/HB25; 4J100/HC19; 4J100/JA45
JP 2005113133		IPCI	C09D0011-10 [ICM,7]; H01B0001-22 [ICS,7]; H01B0003-00 [ICS,7]; H05K0003-12 [ICS,7]
		IPCR	C09D0011-10 [I,A]; C09D0011-10 [I,C*]; H01B0001-22 [I,A]; H01B0001-22 [I,C*]; H01B0003-00 [I,A]; H01B0003-00 [I,C*]; H05K0003-12 [I,A]; H05K0003-12 [I,C*]
		FTERM	4J039/AD07; 4J039/BA06; 4J039/BA07; 4J039/BC03; 4J039/BC07; 4J039/BC18; 4J039/BC19; 4J039/BC20; 4J039/BC26; 4J039/BE29; 4J039/CA04; 4J039/EA24; 4J039/EA43; 4J039/EA48; 4J039/FA04; 4J039/FA06; 4J039/GA10; 5E343/BB23; 5E343/BB24; 5E343/BB25; 5E343/BB44; 5E343/BB48; 5E343/BB49; 5E343/BB72; 5E343/CC17; 5E343/DD03; 5E343/GG08; 5G301/DA10; 5G301/DA42; 5G301/DD01; 5G303/AA10; 5G303/AB20; 5G303/BA07; 5G303/CA01; 5G303/CA02; 5G303/CA09; 5G303/CB01; 5G303/CB03; 5G303/CB35
US 20060192180		IPCI	H01B0001-12 [I,A]
		NCL	252/500.000
		ECLA	C08F008/28+216/06

AB A modified polyvinyl acetal with excellent dispersibility for inorg. powders is useful for a binder resin for coating pastes, a conductive paste, a ceramic paste or a glass paste for use in, e.g., display panel or semiconductor device fabrication, etc. The modified polyvinyl acetal comprises a vinyl ester unit, a vinyl alc. unit, an  $\alpha$ -olefin unit and an acetal unit. Thus, acetalizing a saponified poly(vinyl alc.) having ethylene unit content 10 mol% and saponification degree 88 mol% with Bu aldehyde

gave a modified polyvinyl acetal resin which was kneaded with 2020 SS (Ni powder) and  $\alpha$ -terpineol to give a conducting paste.

ST elec conducting paste manuf binder modified vinyl acetal resin

IT Aluminoborosilicate glasses

RL: MOA (Modifier or additive use); USES (Uses)  
(lead aluminoborosilicate, powder; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

IT Electrically conductive pastes

Semiconductor device fabrication  
(manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

IT Polyvinyl acetals

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(paste containing S-Lec BM-S; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

IT 7440-02-0, 2020SS, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(2020SS, conductive powder; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)  
IT 12047-27-7, BT 03, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(ceramic powder; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)  
IT 24937-78-8DP, EVA, saponified, acetal derivs.  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Konica Corp; JP 2002283699 A 2002 CAPLUS
- (2) Kuraray Co Ltd; JP 63-79741 A 1988 CAPLUS
- (3) Kuraray Co Ltd; JP 63-79752 A 1988 CAPLUS
- (4) Kuraray Co Ltd; EP 1384731 A1 2004 CAPLUS
- (5) Kuraray Co Ltd; US 20040024137 A1 2004
- (6) Kuraray Co Ltd; JP 200468013 A 2004

=> s conductive paste#  
191476 CONDUCTIVE  
122590 PASTE#

L8 6689 CONDUCTIVE PASTE#  
(CONDUCTIVE (W) PASTE#)

=> d his

(FILE 'HOME' ENTERED AT 10:55:14 ON 22 SEP 2008)

FILE 'CAPLUS' ENTERED AT 10:55:43 ON 22 SEP 2008  
E US2006192180/PN  
E US20060192180/PN

L1 1 S E3

FILE 'REGISTRY' ENTERED AT 10:58:28 ON 22 SEP 2008

L2 1 S 7440-02-0/RN  
L3 1 S 12047-27-7/RN  
L4 1 S 24937-78-8/RN

FILE 'CAPLUS' ENTERED AT 11:02:01 ON 22 SEP 2008

L5 428 S POLYVINYL ACETAL RESIN#  
E ICHITANI MOTO/AU  
L6 51 S E4  
L7 6 S L5 AND L6  
L8 6689 S CONDUCTIVE PASTE#

=> s 15 and 18

L9 6 L5 AND L8

=> d 1-6 all

L9 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2008:769897 CAPLUS  
DN 149:55302  
ED Entered STN: 26 Jun 2008  
TI Modified polyvinyl acetal resins and their  
coating, electrically conductive, and ceramic pastes

IN Ichitani, Motokuni  
 PA Sekisui Chemical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 13pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008143922	A	20080626	JP 2006-328828	20061205
PRAI	JP 2006-328828		20061205		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2008143922	IPCI	C08F0008-28 [I,A]; C08F0008-00 [I,C*]; H01B0001-22 [I,A]; C09D0005-24 [I,A]; C09D0129-14 [I,A]; C09D0129-00 [I,C*]
	FTERM	4J038/CE061; 4J038/HA066; 4J038/HA186; 4J038/HA216; 4J038/HA316; 4J038/HA436; 4J038/HA466; 4J038/KA06; 4J038/NA20; 4J038/PB09; 4J100/AA02Q; 4J100/AA02R; 4J100/AD02S; 4J100/AF15T; 4J100/AF16T; 4J100/AG02P; 4J100/AG03P; 4J100/AG04P; 4J100/AG06P; 4J100/AJ02Q; 4J100/AJ09Q; 4J100/AJ10Q; 4J100/AK08S; 4J100/AK20S; 4J100/AK32Q; 4J100/AM02Q; 4J100/AM15Q; 4J100/BA03H; 4J100/BA03T; 4J100/BA16H; 4J100/BA16Q; 4J100/BC43T; 4J100/BC59H; 4J100/CA04; 4J100/CA05; 4J100/CA31; 4J100/DA30; 4J100/DA32; 4J100/DA33; 4J100/HA09; 4J100/HA43; 4J100/HB39; 4J100/HC17; 4J100/HC18; 4J100/HC19; 4J100/HC20; 4J100/HE12; 4J100/JA01; 4J100/JA44; 4J100/JA45; 5G301/DA03; 5G301/DA05; 5G301/DA06; 5G301/DA10; 5G301/DA11; 5G301/DA12; 5G301/DA42; 5G301/DD01

AB The invention relates to title resins, useful for multilayer ceramic capacitors, with content of ethylene, pendant OH, and pendant CO<sub>2</sub>H, resp., 1-20, 15-40, and 0.01-10 mol% and degree of saponification and acetalization, resp., ≥80 and 40-80 mol% manufactured by acetalization of modified vinyl alc. polymers with aldehydes. Thus, a conductive paste containing a modified polyvinyl butyral manufactured from a saponified ethylene-vinyl acetate copolymer and a saponified itaconic acid-vinyl acetate copolymer showed good screen printability.

ST screen printability multilayer ceramic capacitor polyvinyl butyral; saponified ethylene vinyl acetate copolymer polyvinyl butyral; polyvinyl butyral saponified itaconic acid vinyl acetate copolymer

IT Electrically conductive pastes  
 (modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT Polyvinyl butyrals  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT Aldehydes, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT Ceramic capacitors  
 (multilayer; modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT Ceramic coatings  
 Coating materials

(pastes; modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT 24937-78-8DP, Ethylene-vinyl acetate copolymer, saponified, acetal with butyraldehyde 43158-52-7DP, Itaconic acid-vinyl acetate copolymer, saponified, acetal with butyraldehyde

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT 75-07-0, Acetaldehyde, reactions 123-72-8, Butyraldehyde

RL: RCT (Reactant); RACT (Reactant or reagent) (modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

L9 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:760073 CAPLUS

DN 147:155558

ED Entered STN: 13 Jul 2007

TI Multilayer electronic component and its fabrication

IN Sogabe, Tomohiro; Kojima, Tatsuya

PA TDK Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 12pp.

CODEN: JKXXAF

DT Patent

LA Japanese

CC 76-3 (Electric Phenomena)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007180198	A	20070712	JP 2005-375798	20051227
PRAI	JP 2005-375798			20051227	

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2007180198	IPCI		H01G0004-12 [I,A]; H01G0004-30 [I,A]
	IPCR		H01G0004-12 [I,C]; H01G0004-12 [I,A]; H01G0004-30 [I,C]; H01G0004-30 [I,A]
	FTERM		5E001/AB03; 5E001/AC01; 5E001/AD04; 5E001/AH01; 5E001/AH05; 5E001/AJ01; 5E001/AJ02; 5E082/AB03; 5E082/EE04; 5E082/EE11; 5E082/EE23; 5E082/EE35; 5E082/FF05; 5E082/FG06; 5E082/FG26; 5E082/FG48; 5E082/LL02

AB A method for fabricating a multilayer electronic component involves preparing a sheet laminate from a unit of a first green sheet, second green sheet on the first, and a conductor layer from a paste on the second green sheet, and pressing the sheet laminate: the paste containing a solvent for dissolving the resin of the second green sheet more than that of the first green sheet to remove the step difference. Specifically, the solvent may comprise dihydroterpineol, and the resins may comprise a polyvinyl acetal resin and cellulose resin.

ST multilayer electronic device fabrication conductor paste solvent green sheet

IT Electric apparatus

Electrically conductive pastes

Electronic device fabrication

(multilayer electronic component and its fabrication using conductor paste and green sheets)

IT Polyvinyl acetals

RL: TEM (Technical or engineered material use); USES (Uses)

(multilayer electronic component and its fabrication using conductor paste and green sheets)

IT 9004-34-6, Cellulose, uses 58985-02-7, Dihydroterpineol

RL: TEM (Technical or engineered material use); USES (Uses)  
(multilayer electronic component and its fabrication using conductor  
paste and green sheets)

L9 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:101214 CAPLUS

DN 144:193288

ED Entered STN: 03 Feb 2006

TI Ceramic pastes, electrically conductive pastes and  
dielectric pastes

IN Ichitani, Motokuni; Ochitani, Yukio

PA Sekisui Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

CC 38-3 (Plastics Fabrication and Uses)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006027990	A	20060202	JP 2004-213479	20040721
PRAI	JP 2004-213479		20040721		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006027990	IPCI	C04B0035-632 [I,A]; C04B0035-63 [I,C*]; H01B0001-22 [I,A]; H01B0003-00 [I,A]; C04B0035-00 [I,A]	
	FTERM	4G030/AA10; 4G030/AA16; 4G030/BA09; 4G030/GA14; 4G030/GA15; 4G030/PA22; 5G301/DA02; 5G301/DA03; 5G301/DA04; 5G301/DA05; 5G301/DA33; 5G301/DA34; 5G301/DA42; 5G301/DD01; 5G303/AA05; 5G303/AB20; 5G303/BA07; 5G303/CA01; 5G303/CA02; 5G303/CA03; 5G303/CA09	

OS MARPAT 144:193288

AB The title pastes contain polyvinyl acetal  
resins, plasticizers and  $\geq$ 5 volume% inorg. powder where the  
plasticizers are obtained from  $R1C(:O)O(XO)nC(:O)R2$  ( $X = C1-6$  linear or  
branched alkylene group;  $R1, R2 = C1-20$  linear, branched or cyclic alkyl  
group;  $n = 1-5$ ) for improving the health safety of products without  
compromising their quality. Thus, mixing a 15% ethanol solution of BM-SZ  
(polyvinyl acetal) with 30 parts per 100 parts BM-SZ of diethylene glycol  
dinonanoate (I), casting the resulting mixture into sheet and heating at  
60° or 140° for 20 min gave a sheet with heat flow temperature  
90° or 99°, resp., vs. 142° and 142°, resp. in  
the absence of I. A ceramic paste was prepared by using the resin and  
plasticizer above and a ceramic powder.

ST conductive dielec ceramic paste manuf polyalkylene glycol diacylate  
plasticizer

IT Polyvinyl acetals

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or  
engineered material use); USES (Uses)  
(BM-SZ; safe plasticizers for manufacture of ceramic pastes, elec.  
conductive pastes and dielec. pastes)

IT Pastes

(dielec.; safe plasticizers for manufacture of ceramic pastes, elec.  
conductive pastes and dielec. pastes)

IT Ceramics

(pastes containing; safe plasticizers for manufacture of ceramic pastes,  
elec.  
conductive pastes and dielec. pastes)

IT Electric insulators

(pastes; safe plasticizers for manufacture of ceramic pastes, elec.

IT conductive pastes and dielec. pastes)

IT Electrically conductive pastes

Pastes

Plasticizers

(safe plasticizers for manufacture of ceramic pastes, elec. conductive pastes and dielec. pastes)

IT 106-01-4, Diethylene glycol dinonanoate 7434-40-4, Triethylene glycol diheptanoate 7735-24-2 41395-83-9 874909-90-7 874985-14-5, Butylene glycol di(3-ethylheptanoate) RL: MOA (Modifier or additive use); USES (Uses) (plasticizer; safe plasticizers for manufacture of ceramic pastes, elec. conductive pastes and dielec. pastes)

L9 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:1240723 CAPLUS

DN 143:478678

ED Entered STN: 24 Nov 2005

TI Poly(vinyl acetal) resins for slurry compositions, conductive pastes, ceramic condensers, and photographic materials and their manufacture

IN Ichitani, Motokuni; Ochitani, Yukio

PA Sekisui Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F016-38

CC 37-3 (Plastics Manufacture and Processing)  
Section cross-reference(s): 57, 74, 76

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005325342	A	20051124	JP 2005-113707	20050411
PRAI JP 2004-117061	A	20040412		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2005325342	ICM	C08F016-38
	IPCI	C08F0016-38 [ICM, 7]; C08F0016-00 [ICM, 7, C*]
	FTERM	4J100/AF15P; 4J100/CA01; 4J100/CA03; 4J100/DA33; 4J100/DA39; 4J100/HA43; 4J100/HA61; 4J100/HB25; 4J100/HB52; 4J100/HC16; 4J100/HC17; 4J100/HE05; 4J100/HE32; 4J100/JA37; 4J100/JA45

AB Title resins prepared from poly(vinyl alc.) (I) and acetals show a decrease of filtration flow rate (R) of <10% at 25° and 10-mmHg filtration pressure by 5% the resin solution (in MEK and in 1:1 PhMe/EtOH blend) and 5-μm filters. An aqueous solution of 7% I (with saponified degree 85 mol%, d.p.)

d.p. 103) was stirred at 90° for 2 h, cooled to room temperature, left for overnight to form a solution with no viscosity increase, which was reacted with butyraldehyde to form a polyvinyl butyral showing R in MEK of 94% and R in 1:1 PhMe/EtOH blend of 96%.

ST polyvinyl acetal org soln shortened filtration process; ceramic condenser polyvinyl acetal slurry compn; elec conductive paste polyvinyl acetal manuf; heat developable photog material polyvinyl acetal emulsion

IT Photographic emulsions (heat-developable; manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT Capacitors (laminated ceramic sheets for; manufacture of polyvinyl

acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT Filtration  
 (manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT Polyvinyl acetals  
 Polyvinyl butyral  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT 9002-89-5, Poly(vinyl alcohol)  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (controlled saponified degree; manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT 108-88-3, Toluene, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (ethanol blends; manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT 78-93-3, Methyl ethyl ketone, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

IT 64-17-5, Ethanol, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (toluene blend; manufacture of polyvinyl acetal resins by fast filtration for ceramic condensers, conductive pastes, and photog. materials)

L9 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:74133 CAPLUS  
 DN 142:156879  
 ED Entered STN: 28 Jan 2005  
 TI Modified polyvinyl acetal binder resin for coating paste with good applicability  
 IN Ichitani, Motokuni; Ii, Daizo; Ochitani, Yukio; Takahashi, Hideyuki;  
 Sakashita, Katsuaki  
 PA Sekisui Chemical Co., Ltd., Japan  
 SO PCT Int. Appl., 39 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 IC ICM C08F008-48  
 ICS C09D129-14  
 CC 37-3 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 38, 74, 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005007710	A1	20050127	WO 2004-JP9127	20040628
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,				

	TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW		
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,			
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,			
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,			
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,			
SN, TD, TG			
JP 2005089695	A 20050407	JP 2003-328162	20030919
JP 2005268055	A 20050929	JP 2004-79082	20040318
JP 2005303008	A 20051027	JP 2004-117062	20040412
JP 2005298792	A 20051027	JP 2004-190354	20040628
JP 4146823	B2 20080910		
EP 1637546	A1 20060322	EP 2004-746596	20040628
R: BE, DE, FR, GB, IT			
CN 1809598	A 20060726	CN 2004-80017415	20040628
JP 2005298793	A 20051027	JP 2004-233469	20040810
JP 2005113133	A 20050428	JP 2004-270142	20040916
US 20060192180	A1 20060831	US 2005-561971	20051222
PRAI JP 2003-183187	A 20030626		
JP 2003-328162	A 20030919		
JP 2003-328163	A 20030919		
JP 2004-79082	A 20040318		
JP 2004-79083	A 20040318		
JP 2004-117062	A 20040412		
WO 2004-JP9127	W 20040628		

#### CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2005007710	ICM	C08F008-48
	ICS	C09D129-14
	IPCI	C08F0008-48 [ICM, 7]; C08F0008-00 [ICM, 7, C*]; C09D0129-14 [ICS, 7]; C09D0129-00 [ICS, 7, C*]
	IPCR	C08F0008-00 [I, C*]; C08F0008-28 [I, A]; C08F0008-48 [I, A]; C09D0129-00 [I, C*]; C09D0129-14 [I, A]
	ECLA	C08F008/28+216/06
JP 2005089695	IPCI	C08F0008-28 [ICM, 7]; C08F0008-00 [ICM, 7, C*]; C03C0008-16 [ICS, 7]; C03C0008-00 [ICS, 7, C*]; C08F0016-06 [ICS, 7]; C08F0016-00 [ICS, 7, C*]; C08K0003-40 [ICS, 7]; C08K0003-00 [ICS, 7, C*]; C08L0029-14 [ICS, 7]; C08L0029-00 [ICS, 7, C*]; C09J0129-14 [ICS, 7]; C09J0129-00 [ICS, 7, C*]; H01J0011-02 [ICS, 7]
	IPCR	C03C0008-00 [I, C*]; C03C0008-16 [I, A]; C08F0008-00 [I, C*]; C08F0008-28 [I, A]; C08F0016-00 [I, C*]; C08F0016-06 [I, A]; C08K0003-00 [I, C*]; C08K0003-40 [I, A]; C08L0029-00 [I, C*]; C08L0029-14 [I, A]; C09J0129-00 [I, C*]; C09J0129-14 [I, A]; H01J0011-02 [I, A]; H01J0011-02 [I, C*]
	FTERM	4G062/AA09; 4G062/BB01; 4G062/MM23; 4G062/NN32; 4G062/PP14; 4J002/BE031; 4J002/DL006; 4J002/GJ01; 4J040/DD071; 4J040/HA346; 4J040/JA05; 4J040/KA03; 4J040/KA23; 4J040/LA06; 4J040/LA07; 4J040/MA05; 4J040/NA19; 4J100/AA02Q; 4J100/AD02S; 4J100/AF15R; 4J100/AG04P; 4J100/BA03H; 4J100/BC59H; 4J100/CA31; 4J100/HA09; 4J100/HA43; 4J100/HC18; 4J100/HC19; 4J100/JA03; 5C040/GF18; 5C040/KA07; 5C040/KA08
JP 2005268055	IPCI	H01B0001-22 [ICM, 7]; H05K0003-12 [ICS, 7]; H01G0004-12 [ICS, 7]
	IPCR	H01B0001-22 [I, A]; H01B0001-22 [I, C*]; H01G0004-12 [N, A]; H01G0004-12 [N, C*]; H05K0003-12 [I, A]; H05K0003-12 [I, C*]
	FTERM	5E001/AB03; 5E001/AC09; 5E001/AH01; 5E001/AJ01; 5E343/AA23; 5E343/BB23; 5E343/BB24; 5E343/BB25;

		5E343/BB44; 5E343/BB48; 5E343/BB49; 5E343/BB76; 5E343/DD03; 5E343/DD64; 5E343/FF02; 5E343/FF11; 5E343/GG02; 5E343/GG08; 5G301/DA10; 5G301/DA42; 5G301/DD01
JP 2005303008	IPCI	H01G0004-12 [ICM, 7]; B28B0001-30 [ICS, 7]; C04B0035-00 [ICS, 7]; C04B0035-632 [ICS, 7]; C04B0035-63 [ICS, 7, C*]; B28B0011-00 [ICS, 7]
	IPCR	B28B0001-30 [I, A]; B28B0001-30 [I, C*]; B28B0011-00 [N, A]; B28B0011-00 [N, C*]; C04B0035-00 [I, A]; C04B0035-00 [I, C*]; C04B0035-63 [I, C*]; C04B0035-632 [I, A]; H01G0004-12 [I, A]; H01G0004-12 [I, C*]
	FTERM	4G030/AA07; 4G030/AA10; 4G030/AA16; 4G030/AA17; 4G030/AA32; 4G030/AA36; 4G030/AA37; 4G030/AA47; 4G030/AA51; 4G030/AA52; 4G030/BA09; 4G030/GA14; 4G030/GA17; 4G030/PA11; 4G030/PA21; 4G052/DA05; 4G052/DA08; 4G052/DB12; 4G052/DC06; 4G055/AA08; 4G055/AA10; 4G055/AC01; 4G055/AC09; 4G055/BA22; 4G055/BA35; 4G055/BA43; 5E001/AB06; 5E001/AH01; 5E001/AJ02
JP 2005298792	IPCI	H01B0001-22 [I, A]; C08F0216-38 [I, A]; C08F0216-00 [I, C*]; C08L0029-14 [I, A]; C08L0029-00 [I, C*]; C08K0003-00 [I, A]; C08K0005-00 [I, A]
	IPCR	C08F0216-00 [I, C*]; C08F0216-38 [I, A]; C08K0003-00 [I, A]; C08K0003-00 [I, C*]; C08K0005-00 [I, A]; C08K0005-00 [I, C*]; C08L0029-00 [I, C*]; C08L0029-14 [I, A]; H01B0001-22 [I, A]; H01B0001-22 [I, C*]; H01G0004-12 [N, A]; H01G0004-12 [N, C*]; H01G0004-30 [N, A]; H01G0004-30 [N, C*]
	FTERM	4J002/BE061; 4J002/DA076; 4J002/DA106; 4J002/DA116; 4J002/EF027; 4J002/EF037; 4J002/EF057; 4J002/EH158; 4J002/EN027; 4J002/FD116; 4J002/GQ02; 4J002/HA08; 4J100/AA00S; 4J100/AA01S; 4J100/AA02S; 4J100/AA03S; 4J100/AD02Q; 4J100/AF15P; 4J100/AG02R; 4J100/AG03R; 4J100/AG04R; 4J100/CA06; 4J100/JA45; 5E001/AB03; 5E001/AC09; 5E001/AH01; 5E001/AJ01; 5E082/AA01; 5E082/AB03; 5E082/BC32; 5E082/BC33; 5E082/BC40; 5E082/EE04; 5E082/EE23; 5E082/EE35; 5E082/FF05; 5E082/FG04; 5E082/FG26; 5E082/FG46; 5E082/FG54; 5E082/KK01; 5E082/LL02; 5E082/MM22; 5E082/MM24; 5E082/PP03; 5G301/DA10; 5G301/DA42; 5G301/DD01
EP 1637546	IPCI	C08F0008-48 [ICM, 7]; C08F0008-00 [ICM, 7, C*]; C09D0129-14 [ICS, 7]; C09D0129-00 [ICS, 7, C*]
	IPCR	C08F0008-00 [I, C*]; C08F0008-28 [I, A]; C08F0008-48 [I, A]; C09D0129-00 [I, C*]; C09D0129-14 [I, A]
	ECLA	C08F008/28+216/06
CN 1809598	IPCI	C08F0008-48 [I, A]; C08F0008-00 [I, C*]; C09D0129-14 [I, A]; C09D0129-00 [I, C*]
JP 2005298793	IPCI	C08L0029-14 [ICM, 7]; C08L0029-00 [ICM, 7, C*]; C08F0016-38 [ICS, 7]; C08F0016-00 [ICS, 7, C*]; C08K0005-04 [ICS, 7]; C08K0005-00 [ICS, 7, C*]
	IPCR	C08F0016-00 [I, C*]; C08F0016-38 [I, A]; C08K0005-00 [I, C*]; C08K0005-04 [I, A]; C08L0029-00 [I, C*]; C08L0029-14 [I, A]
	FTERM	4J002/BE061; 4J002/CH052; 4J002/DA076; 4J002/DA086; 4J002/DB006; 4J002/EF037; 4J002/EF058; 4J002/EG037; 4J002/EH057; 4J002/EH157; 4J002/EN028; 4J002/EP018; 4J002/FD116; 4J002/GQ02; 4J100/AA02Q; 4J100/AD02P; 4J100/AF15P; 4J100/BA10H; 4J100/CA06; 4J100/CA31; 4J100/HA09; 4J100/HA56; 4J100/HA61; 4J100/HB25; 4J100/HC19; 4J100/JA45
JP 2005113133	IPCI	C09D0011-10 [ICM, 7]; H01B0001-22 [ICS, 7]; H01B0003-00 [ICS, 7]; H05K0003-12 [ICS, 7]

IPCR C09D0011-10 [I,A]; C09D0011-10 [I,C\*]; H01B0001-22  
 [I,A]; H01B0001-22 [I,C\*]; H01B0003-00 [I,A];  
 H01B0003-00 [I,C\*]; H05K0003-12 [I,A]; H05K0003-12  
 [I,C\*]  
 FTERM 4J039/AD07; 4J039/BA06; 4J039/BA07; 4J039/BC03;  
 4J039/BC07; 4J039/BC18; 4J039/BC19; 4J039/BC20;  
 4J039/BC26; 4J039/BE29; 4J039/CA04; 4J039/EA24;  
 4J039/EA43; 4J039/EA48; 4J039/FA04; 4J039/FA06;  
 4J039/GA10; 5E343/BB23; 5E343/BB24; 5E343/BB25;  
 5E343/BB44; 5E343/BB48; 5E343/BB49; 5E343/BB72;  
 5E343/CC17; 5E343/DD03; 5E343/GG08; 5G301/DA10;  
 5G301/DA42; 5G301/DD01; 5G303/AA10; 5G303/AB20;  
 5G303/BA07; 5G303/CA01; 5G303/CA02; 5G303/CA09;  
 5G303/CB01; 5G303/CB03; 5G303/CB35  
 US 20060192180 IPCI H01B0001-12 [I,A]  
 NCL 252/500.000  
 ECLA C08F008/28+216/06  
 AB A modified polyvinyl acetal with excellent dispersibility for inorg. powders is useful for a binder resin for coating pastes, a conductive paste, a ceramic paste or a glass paste for use in, e.g., display panel or semiconductor device fabrication, etc. The modified polyvinyl acetal comprises a vinyl ester unit, a vinyl alc. unit, an  $\alpha$ -olefin unit and an acetal unit. Thus, acetalizing a saponified poly(vinyl alc.) having ethylene unit content 10 mol% and saponification degree 88 mol% with Bu aldehyde gave a modified polyvinyl acetal resin which was kneaded with 2020 SS (Ni powder) and  $\alpha$ -terpineol to give a conducting paste.  
 ST elec conducting paste manuf binder modified vinyl acetal resin  
 IT Aluminoborosilicate glasses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (lead aluminoborosilicate, powder; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)  
 IT Electrically conductive pastes  
 Semiconductor device fabrication  
 (manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)  
 IT Polyvinyl acetals  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (paste containing S-Lec BM-S; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)  
 IT 7440-02-0, 2020SS, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (2020SS, conductive powder; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)  
 IT 12047-27-7, BT 03, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (ceramic powder; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)  
 IT 24937-78-8DP, EVA, saponified, acetal derivs.  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)  
 RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE  
 (1) Konica Corp; JP 2002283699 A 2002 CAPLUS  
 (2) Kuraray Co Ltd; JP 63-79741 A 1988 CAPLUS

- (3) Kuraray Co Ltd; JP 63-79752 A 1988 CAPLUS
- (4) Kuraray Co Ltd; EP 1384731 A1 2004 CAPLUS
- (5) Kuraray Co Ltd; US 20040024137 A1 2004
- (6) Kuraray Co Ltd; JP 200468013 A 2004

L9 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 1997:692381 CAPLUS  
DN 127:325297  
OREF 127:63667a  
ED Entered STN: 01 Nov 1997  
TI Electrically conductive copper paste composition containing  
polyvinyl acetal resin  
IN Komiyatani, Toshiro; Nagata, Hiroshi  
PA Sumitomo Bakelite Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM H01B001-22  
ICS C08L029-14; C09D005-24; C09D201-00; H05K001-09  
CC 76-2 (Electric Phenomena)  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09274812	A	19971021	JP 1996-85458	19960408
	JP 3290346	B2	20020610		
PRAI	JP 1996-85458		19960408		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 09274812	ICM	H01B001-22
		ICS	C08L029-14; C09D005-24; C09D201-00; H05K001-09
		IPCI	H01B0001-22 [ICM,6]; C08L0029-14 [ICS,6]; C09D0005-24 [ICS,6]; C09D0201-00 [ICS,6]; H05K0001-09 [ICS,6]
		IPCR	H05K0001-09 [I,C*]; H05K0001-09 [I,A]; C08L0029-00 [I,C*]; C08L0029-14 [I,A]; C09D0005-24 [I,C*]; C09D0005-24 [I,A]; C09D0201-00 [I,C*]; C09D0201-00 [I,A]; H01B0001-22 [I,C*]; H01B0001-22 [I,A]

AB The composition contains Cu powders, a thermosetting resin, a polyvalent phenol monomer, a solvent, and a polyvinyl acetal resin. The composition shows good reliability for a through hole in a printed circuit. The composition shows good adhesion, heat resistance, and flexibility.

ST copper elec conductive paste polyvinyl acetal;  
conductive copper paste elec printed circuit

IT Electrically conductive pastes  
Printed circuits

(elec. conductive Cu paste composition containing polyvinyl acetal resin for printed circuit)

IT Polyvinyl acetals

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(elec. conductive Cu paste composition containing polyvinyl acetal resin for printed circuit)

IT Phenolic resins, uses

RL: DEV (Device component use); USES (Uses)

(resol; elec. conductive Cu paste composition containing polyvinyl acetal resin for printed circuit)

IT 7440-50-8, Copper, uses

RL: DEV (Device component use); USES (Uses)

(elec. conductive Cu paste composition containing polyvinyl acetal resin for printed circuit)

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=> e li daizo/cn
    REGISTRY INITIATED
    Substance data EXPAND from CAS REGISTRY in progress...
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E1      1      LI BAO FENG/CN
E2      1      LI CHLORPROMAZINE SUCCINATE/CN
E3      0 --> LI DAIZO/CN
E4      1      LI DAN FENG/CN
E5      1      LI DODECYL ALCOHOL DIETHYLENE GLYCOL ETHER SULFATE/CN
E6      1      LI DODECYL SULFATE/CN
E7      1      LI FLUPHENAZINE SUCCINATE/CN
E8      1      LI HYDROXYBUTYRATE/CN
E9      1      LI TALC JA 46R/CN
E10     1      LI TETRA-PHENYL-BORATE/CN
E11     1      LI(NH3)4NA/CN
E12     1      LI+/H+ ANTI-PORTER (PSEUDOMONAS AERUGINOSA STRAIN PAO1 GENE N
          HAB)/CN
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=> e li daizo/au
E1      3      LI DAIZHEN/AU
E2      13     LI DAIZHONG/AU
E3      0 --> LI DAIZO/AU
E4      1      LI DAIZON/AU
E5      31     LI DAIZONG/AU
E6      20     LI DAJI/AU
E7      2      LI DAJIAN/AU
E8      21     LI DAJIANG/AU
E9      7      LI DAJIE/AU
E10     95     LI DAJIN/AU
E11     15     LI DAJING/AU
E12     2      LI DAJU/AU
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=> s e4;d
L10      1 "LI DAIZON"/AU
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L10  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2008 ACS on STN
AN  1995:184690  CAPLUS
DN  122:257322
OREF 122:46765a,46768a
TI  Foreign genes expression in rat vascular smooth muscle cells
AU  Yao, Aging; Sun, Shuangdan; Zhu, Xiaojun; Wen, Jinkun; Yu, Weiyuan;
    Li, Daizon; Gu, Jianren; Zhou, Airu; Tang, Jian
CS  Inst. Cardiovascular Res., Beijing Med. Univ., Beijing, 100083, Peop. Rep.
    China
SO  Zhonghua Yixue Zazhi (Beijing, China) (1994), 74(4), 224-7
    CODEN: CHHTAT; ISSN: 0376-2491
DT  Journal
LA  Chinese
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=> s e5;d
L11      31 "LI DAIZONG"/AU
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L11 ANSWER 1 OF 31 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:728040 CAPLUS  
DN 141:344961  
TI Tobacco Smoke Control of Mucin Production in Lung Cells Requires Oxygen Radicals AP-1 and JNK  
AU Gensch, Erin; Gallup, Marianne; Sucher, Anatol; Li, Daizong; Gebremichael, Assefa; Lemjabbar, Hassan; Mengistab, Aklilu; Dasari, Vijay; Hotchkiss, Jon; Harkema, Jack; Basbaum, Carol  
CS Department of Anatomy, Cardiovascular Research Institute and Biomedical Sciences Graduate Program, University of California, San Francisco, CA, 94143, USA  
SO Journal of Biological Chemistry (2004), 279(37), 39085-39093  
CODEN: JBCHA3; ISSN: 0021-9258  
PB American Society for Biochemistry and Molecular Biology  
DT Journal  
LA English  
RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> e ochitani yukio/au  
E1 5 OCHITANI TAKAHIRO/AU  
E2 1 OCHITANI TETSUYA/AU  
E3 39 --> OCHITANI YUKIO/AU  
E4 1 OCHITWA MARK J/AU  
E5 46 OCHIUMI MASAHIRO/AU  
E6 2 OCHIUMI T/AU  
E7 5 OCHIUMI TAKEHIKO/AU  
E8 41 OCHIUMI TSUKASA/AU  
E9 2 OCHIUZ LACRAMIOARA/AU  
E10 1 OCHIUZ LACRAMIOARA ESTER/AU  
E11 16 OCHIWA KENICHI/AU  
E12 30 OCHIWA SHINICHI/AU

=> s e3  
L12 39 "OCHITANI YUKIO"/AU

=> e takahashi hideyuki/au  
E1 14 TAKAHASHI HIDEYORI/AU  
E2 7 TAKAHASHI HIDEYOSHI/AU  
E3 659 --> TAKAHASHI HIDEYUKI/AU  
E4 3 TAKAHASHI HIDEZO/AU  
E5 8 TAKAHASHI HIFUMI/AU  
E6 3 TAKAHASHI HIHUMI/AU  
E7 1 TAKAHASHI HIJIME/AU  
E8 12 TAKAHASHI HIKARU/AU  
E9 1 TAKAHASHI HIKO ITARU/AU  
E10 7 TAKAHASHI HIKOJI/AU  
E11 2 TAKAHASHI HIKOTO/AU  
E12 1 TAKAHASHI HILTON K/AU

=> s e3;  
L13 659 "TAKAHASHI HIDEYUKI"/AU

=> e sakashita katsuaki/au  
E1 6 SAKASHITA KANAKO/AU  
E2 1 SAKASHITA KANAME/AU  
E3 31 --> SAKASHITA KATSUAKI/AU  
E4 1 SAKASHITA KATSUHEI/AU  
E5 2 SAKASHITA KATSUHIKO/AU  
E6 1 SAKASHITA KATSUHIRA/AU  
E7 1 SAKASHITA KATSUHIRO/AU

E8 1 SAKASHITA KATSUMI/AU  
E9 3 SAKASHITA KATSUNORI/AU  
E10 13 SAKASHITA KATSUTOSHI/AU  
E11 2 SAKASHITA KATSUYUKI/AU  
E12 4 SAKASHITA KAZUHIRO/AU

=> s e3;d  
L14 31 "SAKASHITA KATSUAKI"/AU

L14 ANSWER 1 OF 31 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:363019 CAPLUS  
DN 144:370933  
TI Aqueous polyvinyl acetal dispersion with good dispersibility under neutral condition  
IN Ichitani, Motokuni; Sakashita, Katsuaki  
PA Sekisui Chemical Co., Ltd., Japan  
SO Jpn. Kokai Tokyo Koho, 6 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006104268	A	20060420	JP 2004-290490	20041001
PRAI JP 2004-290490		20041001		

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(FILE 'HOME' ENTERED AT 10:55:14 ON 22 SEP 2008)

FILE 'CAPLUS' ENTERED AT 10:55:43 ON 22 SEP 2008  
E US2006192180/PN  
E US20060192180/PN

L1 1 S E3

FILE 'REGISTRY' ENTERED AT 10:58:28 ON 22 SEP 2008

L2 1 S 7440-02-0/RN  
L3 1 S 12047-27-7/RN  
L4 1 S 24937-78-8/RN

FILE 'CAPLUS' ENTERED AT 11:02:01 ON 22 SEP 2008  
L5 428 S POLYVINYL ACETAL RESIN#  
E ICHITANI MOTO/AU  
L6 51 S E4  
L7 6 S L5 AND L6  
L8 6689 S CONDUCTIVE PASTE#  
L9 6 S L5 AND L8

FILE 'REGISTRY' ENTERED AT 11:13:44 ON 22 SEP 2008  
E LI DAIZO/CN

FILE 'CAPLUS' ENTERED AT 11:13:45 ON 22 SEP 2008  
E LI DAIZO/AU  
L10 1 S E4  
L11 31 S E5  
E OCHITANI YUKIO/AU  
L12 39 S E3  
E TAKAHASHI HIDEYUKI/AU  
L13 659 S E3

E SAKASHITA KATSUAKI/AU  
L14 31 S E3

=> s (l11 or l12 or l13 or l14) and l5  
L15 9 (L11 OR L12 OR L13 OR L14) AND L5

=> s l15 not l9  
L16 6 L15 NOT L9

=> d 1-6 all

L16 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:100988 CAPLUS  
DN 144:180710  
ED Entered STN: 03 Feb 2006  
TI Polyacetal resin as a binder resin in photosensitive layer of  
heat-developable photographic films  
IN Ichitani, Motokuni; Ochitani, Yukio; Takehara, Hiroaki  
PA Sekisui Chemical Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 16 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other  
Reproductive Processes)  
Section cross-reference(s): 38  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006030959	A	20060202	JP 2005-116184	20050413
PRAI	JP 2004-178717	A	20040616		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 2006030959	IPCI	G03C0001-498 [I,A]; C08F0008-48 [I,A]; C08F0008-00 [I,C*]
		FTERM	2H123/AB00; 2H123/AB03; 2H123/AB23; 2H123/BA00; 2H123/BA14; 2H123/BB00; 2H123/BB39; 2H123/CB00; 2H123/CB03; 4J100/AD02P; 4J100/AF15P; 4J100/HC16; 4J100/HC18; 4J100/HC19; 4J100/JA38

AB The title acetal is used as ≤400 mesh particles, wherein the extracted  
surface water from a particle solution, which is prepared by putting the  
particles in 10 times weight of distilled water, stirring the solution with 40  
rpm  
at 20° C for 20 h; and standing the solution for one hour, has 5.0-8.5  
pH. The resin provides improved storageability as well as good image  
quality.

ST polyacetal resin binder photosensitive layer heat developable photog film  
IT Photographic films  
(heat-developable; polyvinyl acetal resin  
as binder resin in photosensitive layer of heat-developable photog.  
films)

IT Polyoxymethylenes, preparation  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(polyvinyl acetal resin as binder resin  
in photosensitive layer of heat-developable photog. films)  
IT 75-07-0DP, Acetaldehyde, reaction product with poly(vinyl alc.)  
123-72-8DP, Butyl aldehyde, reaction product with poly(vinyl alc.)  
9002-89-5DP, Poly(vinyl alcohol), reaction product with aldehydes  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)

(polyvinyl acetal resin as binder resin  
in photosensitive layer of heat-developable photog. films)

L16 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:100691 CAPLUS  
DN 144:180708  
ED Entered STN: 03 Feb 2006  
TI Polyvinyl acetal resin as binder resin in  
photosensitive layer of heat-developable photographic films  
IN Ichikoku, Motokuni; Ochitani, Yukio; Takehara, Hiroaki; Maeda,  
Takayuki  
PA Sekisui Chemical Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 16 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other  
Reprographic Processes)  
Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006030935	A	20060202	JP 2004-278488	20040924
PRAI	JP 2004-178718	A	20040616		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 2006030935	IPCI	G03C0001-498 [I,A]
		FTERM	2H123/AB00; 2H123/AB03; 2H123/AB23; 2H123/AB25; 2H123/BA00; 2H123/BA14; 2H123/CB00; 2H123/CB03

AB The title resin contains  $\leq$ 100 ppm of total content of 2 kinds of  
materials chosen from: alkali metals; halogen ions; nitrate; and sulfate  
excluding alkali metal/halogen ion combination. The polyvinyl  
acetal resin provides the photog. film of good storage  
ability and high image quality without fogging, coloring, etc.

ST polyvinyl acetal resin binder layer heat  
developable photog film

IT Alkali metals, occurrence  
RL: OCU (Occurrence, unclassified); OCCU (Occurrence)  
(binder resin in photosensitive layer of heat-developable photog.  
films)

IT Photographic films  
(heat-developable; polyvinyl acetal resin  
as binder resin in photosensitive layer of heat-developable photog.  
films)

IT Halogens  
RL: OCU (Occurrence, unclassified); OCCU (Occurrence)  
(ions; binder resin in photosensitive layer of heat-developable photog.  
films)

IT Acetals  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polyacetals, nonpolymeric; binder resin in photosensitive layer of  
heat-developable photog. films)

IT 14797-55-8, Nitrate, occurrence 14808-79-8, Sulfate, occurrence  
RL: OCU (Occurrence, unclassified); OCCU (Occurrence)  
(binder resin in photosensitive layer of heat-developable photog.  
films)

IT 75-07-0DP, Acetaldehyde, reaction product with poly(vinyl alc.)  
123-72-8DP, Butyl aldehyde, reaction product with poly(vinyl alc.)  
9002-89-5DP, Poly(vinyl alcohol), reaction product with aldehydes  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)

(binder resin in photosensitive layer of heat-developable photog. films)

L16 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:48707 CAPLUS  
DN 144:117722  
ED Entered STN: 19 Jan 2006  
TI Heat-developable photographic material and polyvinyl acetal binder for it  
IN Ichikoku, Motokuni; Ochitani, Yukio  
PA Sekisui Chemical Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 14 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006017876	A	20060119	JP 2004-193700	20040630
PRAI JP 2004-193700		20040630		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2006017876	IPCI	G03C0001-498 [I,A]; C08F0008-28 [I,A]; C08F0008-00 [I,C*]; C08F0016-38 [I,A]; C08F0016-00 [I,C*] FTERM 2H123/AB00; 2H123/AB03; 2H123/AB23; 2H123/AB25; 2H123/BA00; 2H123/BA14; 2H123/CB00; 2H123/CB03; 4J100/AD02P; 4J100/AF15P; 4J100/CA01; 4J100/CA31; 4J100/DA37; 4J100/HA43; 4J100/HC16

AB The binder is polyvinyl acetal resin with residual acetyl group  $\leq$ 25 mol%, residual OH group 17-23 mol%, polymerization degree 200-3000, and its 20  $\mu$ m-thick sheet shows moisture permeability  $\leq$ 500 g/cm<sup>2</sup>·day (based on JIS Z 0208). The binder shows less moisture permeability, and photog. material using the binder shows good storage stability and gives images without fog.  
ST heat developable photog film binder; polyvinyl acetal moisture permeability binder  
IT Polyvinyl acetals  
Polyvinyl butyrals  
RL: TEM (Technical or engineered material use); USES (Uses)  
(acetal butyrals; heat-developable photog. material using polyvinyl acetal binder)  
IT Polyvinyl butyrals  
RL: TEM (Technical or engineered material use); USES (Uses)  
(heat-developable photog. material using polyvinyl acetal binder)  
IT Photographic films  
(heat-developable; heat-developable photog. material using polyvinyl acetal binder)  
IT Alkenes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
( $\alpha$ -, copolymers with polyvinyl acetal; heat-developable photog. material using polyvinyl acetal binder)

L16 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 1994:78549 CAPLUS  
DN 120:78549  
OREF 120:14137a,14140a  
ED Entered STN: 19 Feb 1994  
TI Polyvinyl acetal resin particles and their preparation  
IN Ochitani, Yukio

PA Sekisui Chemical Co. Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C08F008-28  
      ICS C08F016-38  
CC 37-3 (Plastics Manufacture and Processing)  
      Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05239131	A	19930917	JP 1992-23594	19920210
PRAI	JP 1992-23594		19920210		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 05239131	ICM	C08F008-28
		ICS	C08F016-38
		IPCI	C08F0008-28 [ICM,5]; C08F0008-00 [ICM,5,C*]; C08F0016-38 [ICS,5]; C08F0016-00 [ICS,5,C*]
		IPCR	C08F0008-00 [I,C*]; C08F0008-28 [I,A]; C08F0016-00 [I,C*]; C08F0016-00 [I,A]; C08F0016-38 [I,A]

AB The particles with storage stability and sound insulation, useful for laminated glass interlayers and binder raw materials, are prepared by (1) forming slurry for core particles containing polyvinyl acetals prepared by acetalizing poly(vinyl alcs.) with C6-10 aldehydes in the presence of acidic catalysts (A) in an aqueous solns. (B) and (2) acetalizing the slurry with C1-4 aldehydes in the presence of A in B to coat the particles with shell layers. Thus, 96.4 g hexanal was stepwise added to a mixture of H2O 2865, poly(vinyl alc.) 224, and 35% HCl 100 g at 15° to give white core particles containing poly(vinyl hexanal) and treated with 60.9 g butylaldehyde in 100 g 35% HCl at 45° for 3 h to obtain white resin particles coated with poly(vinyl acetal) resin outer layers showing blocking resistance after heated at 50° for 500 h and having average particle size 300  $\mu$ m.

ST polyvinyl acetal particle blocking resistance; laminated glass binder polyvinyl acetal; vinyl acetal resin sound insulation; adhesive polyvinyl acetal resin particle

IT Sound insulators  
(laminated glass, containing vinyl acetal polymer interlayers, as binders)

IT Glass, oxide  
RL: USES (Uses)

(sound-insulating, vinyl acetal polymer interlayers for, as binders)

IT Vinyl acetal polymers  
RL: USES (Uses)  
(butyral, core-shell structure particles containing, with storage stability and sound insulation)

IT Vinyl acetal polymers  
RL: USES (Uses)  
(hexanals, core-shell structure particles containing, with storage stability and sound insulation)

IT 66-25-1D, Hexylaldehyde, acetals with poly(vinyl alc.)  
RL: USES (Uses)  
(core-shell structure particles containing, with storage stability and sound insulation)

L16 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1993:413995 CAPLUS

DN 119:13995

OREF 119:2599a,2602a

ED Entered STN: 10 Jul 1993

TI Aqueous ceramic binders  
IN Sakashita, Katsuaki; Masaoka, Tsunehiro; Myake, Yoshitaka  
PA Sekisui Chemical Co. Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 3 pp.  
CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C04B035-00

CC 57-2 (Ceramics)

Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05043303	A	19930223	JP 1991-197765	19910807
	JP 2965393	B2	19991018		
PRAI	JP 1991-197765		19910807		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 05043303	ICM	C04B035-00
		IPCI	C04B0035-00 [ICM,5]
		IPCR	C04B0035-63 [I,C*]; C04B0035-632 [I,A]; C04B0035-00 [I,C*]; C04B0035-00 [I,A]

AB The binders comprise water-soluble polyvinyl acetal resins and glycols having b.p.  $\geq 230^\circ$  as main components. Thus, an Al2O3 ceramic green sheet prepared using the binders containing glycerin showed excellent rupture strength and high elongation.

ST ceramic binder aq polymer; polyvinyl acetal binder ceramic; glycol ceramic binder

IT Glycols, uses  
Vinyl acetal polymers

RL: USES (Uses)  
(binders containing, aqueous, for ceramics)

IT Ceramic materials and wares  
(manufacture of, binders for, aqueous mixts. containing glycols and polyvinyl acetals as)

IT Vinyl acetal polymers  
RL: USES (Uses)  
(butyrls, binders containing, aqueous, for ceramics)

IT 56-81-5, Glycerin, uses 107-21-1, Ethylene glycol, uses 111-46-6,  
Diethylene glycol, uses  
RL: USES (Uses)  
(binders containing, aqueous, for ceramics)

IT 1344-28-1, Alumina, uses  
RL: USES (Uses)  
(ceramic greens, binders for)

L16 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 1990:180199 CAPLUS

DN 112:180199

OREF 112:30499a,30502a

ED Entered STN: 12 May 1990

TI Manufacture of poly(vinyl acetal) resins

IN Asahina, Kenichi; Sakashita, Katsuaki

PA Sekisui Chemical Co. Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F008-28

ICS C08F016-38

CC 35-8 (Chemistry of Synthetic High Polymers)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01318008	A	19891222	JP 1988-148997	19880616
	JP 2592912	B2	19970319		
PRAI	JP 1988-148997			19880616	

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 01318008	ICM	C08F008-28
		ICS	C08F016-38
		IPCI	C08F008-28 [ICM, 4]; C08F008-00 [ICM, 4, C*]; C08F0016-38 [ICS, 4]; C08F0016-00 [ICS, 4, C*]
		IPCR	C08F008-00 [I, C*]; C08F008-28 [I, A]; C08F0016-00 [I, C*]; C08F0016-38 [I, A]

AB The title resins with high acetalization degree and narrow particle size distribution are manufactured by reaction of poly(vinyl alc.) (I) and MeCHO (II) in aqueous phases in the presence of acid catalysts including the following two steps; 1) 0.002-0.2 mol (based on 2 mol vinyl alc. unit) C $\geq$ 3 aldehydes are added at the same time or before mixing all of II with I, and 2) acetals are precipitated by reaction of I, II, and C $\geq$ 3 aldehydes and heated at 40-75°. Thus, 220 g I (d.p. 2400, saponification degree 98.8 mol%) was dissolved in 2810 g water, mixed with 645 g 35% aqueous HCl at 20°, 3.6 g PrCHO and 143 g II were added to the solution in this order at 10°, then the solution was heated at 60° for 2 h to give finely powdered poly(vinyl acetal) resin with acetalization degree 75.7 mol%, average particle size 40  $\mu$ m containing 0.05%  $\geq$ 100  $\mu$ m particles and 0.1%  $\leq$ 10  $\mu$ m particles.

ST polyvinyl acetal resin particle; polyvinyl  
alc acetaldehyde reaction

IT Vinyl acetal polymers

RL: IMF (Industrial manufacture); PREP (Preparation)  
(acetal butyrls, manufacture of, finely powdered, with high acetalization  
degree and narrow particle size distribution)

IT Vinyl acetal polymers

RL: IMF (Industrial manufacture); PREP (Preparation)  
(acetal cyclohexanals, manufacture of, finely powdered, with high  
acetalization  
degree and narrow particle size distribution)

IT Vinyl acetal polymers

RL: IMF (Industrial manufacture); PREP (Preparation)  
(acetal ethylhexanals, manufacture of, finely powdered, with high  
acetalization  
degree and narrow particle size distribution)

IT Vinyl acetal polymers

RL: IMF (Industrial manufacture); PREP (Preparation)  
(acetal propionals, manufacture of, finely powdered, with high acetalization  
degree and narrow particle size distribution)

IT 123-05-7DP, cyclic acetals with poly(vinyl alc.) and acetaldehyde

2043-61-0DP, Cyclohexanecarboxaldehyde, cyclic acetals with poly(vinyl  
alc.) and acetaldehyde

RL: IMF (Industrial manufacture); PREP (Preparation)  
(manufacture of, finely powdered, with high acetalization degree and narrow  
particle size distribution)

=> d his

(FILE 'HOME' ENTERED AT 10:55:14 ON 22 SEP 2008)

FILE 'CAPLUS' ENTERED AT 10:55:43 ON 22 SEP 2008

E US2006192180/PN  
 E US20060192180/PN  
 L1 1 S E3

FILE 'REGISTRY' ENTERED AT 10:58:28 ON 22 SEP 2008  
 L2 1 S 7440-02-0/RN  
 L3 1 S 12047-27-7/RN  
 L4 1 S 24937-78-8/RN

FILE 'CAPLUS' ENTERED AT 11:02:01 ON 22 SEP 2008  
 L5 428 S POLYVINYL ACETAL RESIN#  
     E ICHITANI MOTO/AU  
 L6 51 S E4  
 L7 6 S L5 AND L6  
 L8 6689 S CONDUCTIVE PASTE#  
 L9 6 S L5 AND L8

FILE 'REGISTRY' ENTERED AT 11:13:44 ON 22 SEP 2008  
     E LI DAIZO/CN

FILE 'CAPLUS' ENTERED AT 11:13:45 ON 22 SEP 2008  
     E LI DAIZO/AU  
 L10 1 S E4  
 L11 31 S E5  
     E OCHITANI YUKIO/AU  
 L12 39 S E3  
     E TAKAHASHI HIDEYUKI/AU  
 L13 659 S E3  
     E SAKASHITA KATSUAKI/AU  
 L14 31 S E3  
 L15 9 S (L11 OR L12 OR L13 OR L14) AND L5  
 L16 6 S L15 NOT L9

=> s modified polyvinyl acetal resin#  
     636959 MODIFIED  
     107856 POLYVINYL  
     51840 ACETAL  
     830679 RESIN#  
 L17 13 MODIFIED POLYVINYL ACETAL RESIN#  
     (MODIFIED(W)POLYVINYL(W)ACETAL(W)RESIN#)

=> d 1-13

L17 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2008:769897 CAPLUS  
 DN 149:55302  
 TI Modified polyvinyl acetal resins  
     and their coating, electrically conductive, and ceramic pastes  
 IN Ichitani, Motokuni  
 PA Sekisui Chemical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 13pp.  
     CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2008143922	A	20080626	JP 2006-328828	20061205
PRAI JP 2006-328828		20061205		

L17 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:1088833 CAPLUS

DN 145:407699  
 TI Sublimation-type thermal-transfer printing material and image receiving sheet  
 IN Shiota, Satoshi; Yoshida, Kazuya; Yuki, Masahiro; Takahashi, Toru  
 PA Dainippon Printing Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 23pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006281446	A	20061019	JP 2005-100444	20050331
PRAI JP 2005-100444		20050331		

L17 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:30448 CAPLUS  
 DN 144:130575  
 TI Soft-modified polyvinyl acetal resins  
 IN Lumpp, Andreas  
 PA Wacker Polymer Systems GmbH & Co. KG, Germany  
 SO PCT Int. Appl., 14 pp.  
 CODEN: PIXXD2

DT Patent  
 LA German

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006002831	A1	20060112	WO 2005-EP6819	20050623
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
DE 10200404031969	A1	20060216	DE 2004-102004031969	20040701
EP 1763544	A1	20070321	EP 2005-768177	20050623
EP 1763544	B1	20070815		
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1961008	A	20070509	CN 2005-80017493	20050623
AT 370166	T	20070915	AT 2005-768177	20050623
JP 2008504415	T	20080214	JP 2007-518514	20050623
TW 265933	B	20061111	TW 2005-94121730	20050628
US 20070260021	A1	20071108	US 2006-570145	20061207
IN 2006CN04820	A	20071005	IN 2006-CN4820	20061229
PRAI DE 2004-102004031969	A	20040701		
WO 2005-EP6819	W	20050623		

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:74133 CAPLUS  
 DN 142:156879  
 TI Modified polyvinyl acetal binder resin for coating paste with good

applicability

IN Ichitani, Motokuni; Ii, Daizo; Ochitani, Yukio; Takahashi, Hideyuki;  
Sakashita, Katsuaki

PA Sekisui Chemical Co., Ltd., Japan

SO PCT Int. Appl., 39 pp.  
CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005007710	A1	20050127	WO 2004-JP9127	20040628
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2005089695	A	20050407	JP 2003-328162	20030919
	JP 2005268055	A	20050929	JP 2004-79082	20040318
	JP 2005303008	A	20051027	JP 2004-117062	20040412
	JP 2005298792	A	20051027	JP 2004-190354	20040628
	JP 4146823	B2	20080910		
	EP 1637546	A1	20060322	EP 2004-746596	20040628
	R: BE, DE, FR, GB, IT				
	CN 1809598	A	20060726	CN 2004-80017415	20040628
	JP 2005298793	A	20051027	JP 2004-233469	20040810
	JP 2005113133	A	20050428	JP 2004-270142	20040916
	US 20060192180	A1	20060831	US 2005-561971	20051222
PRAI	JP 2003-183187	A	20030626		
	JP 2003-328162	A	20030919		
	JP 2003-328163	A	20030919		
	JP 2004-79082	A	20040318		
	JP 2004-79083	A	20040318		
	JP 2004-117062	A	20040412		
	WO 2004-JP9127	W	20040628		

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2003:262135 CAPLUS  
DN 138:274120

TI Modified polyvinyl acetal resin  
IN Miyake, Yoshitaka; Sawada, Masakazu  
PA Sekisui Chemical Co., Ltd., Japan  
SO PCT Int. Appl., 74 pp.  
CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003028143	A1	20030403	WO 2002-JP9669	20020920
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,				

PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,  
 UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG  
 AU 2002330316 A1 20030407 AU 2002-330316 20020920  
 JP 2003183325 A 20030703 JP 2002-274605 20020920  
 JP 4133158 B2 20080813  
 EP 1429400 A1 20040616 EP 2002-765606 20020920  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK  
 US 20040260020 A1 20041223 US 2004-490037 20040730  
 JP 2008156632 A 20080710 JP 2007-318385 20071210  
 PRAI JP 2001-289367 A 20010921  
 JP 2001-289368 A 20010921  
 JP 2002-274605 A3 20020920  
 WO 2002-JP9669 W 20020920

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2001:252997 CAPLUS  
 DN 134:282203  
 TI Curable resin compositions with good curability and film forming  
 properties  
 IN Tanaka, Toshiyuki; Toda, Atsushi  
 PA Mitsubishi Chemical Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 17 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001098165	A	20010410	JP 2000-228828	20000728
	US 6555617	B1	20030429	US 2000-628321	20000728
	US 20030130435	A1	20030710	US 2002-290515	20021108
	US 6737474	B2	20040518		
PRAI	JP 1999-214935	A	19990729		
	JP 1999-214936	A	19990729		
	JP 1999-216321	A	19990730		
	US 2000-628321	A1	20000728		

L17 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1999:449267 CAPLUS

DN 131:95958

TI Anisotropic electrically conductive film containing side chain-modified polyvinyl acetal resin

IN Sakurai, Makoto; Matsuse, Takahiro; Kotsubo, Hidefumi; Miura, Akio; Morimura, Yasuhiro

PA Bridgestone Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11195325	A	19990721	JP 1998-12053	19980106
	JP 3922321	B2	20070530		
PRAI	JP 1998-12053		19980106		

L17 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1998:293246 CAPLUS

DN 129:10659

OREF 129:2219a,2222a

TI Recording material for aqueous ink

IN Miyake, Yoshitaka; Kamiyama, Ryuji

PA Sekisui Chemical Co. Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10119421	A	19980512	JP 1996-282574	19961024
	JP 3720929	B2	20051130		
PRAI	JP 1996-282574		19961024		

L17 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1996:731963 CAPLUS

DN 126:35774

OREF 126:7113a,7116a

TI Ceramic slurries for forming green sheets

IN Myake, Yoshitaka; Kamiyama, Takashi

PA Sekisui Chemical Co. Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08259334	A	19961008	JP 1995-67488	19950327
	JP 3276261	B2	20020422		
PRAI	JP 1995-67488		19950327		

L17 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1996:144865 CAPLUS

DN 124:189570

OREF 124:34827a,34830a

TI Ink ribbon for thermal sublimation transfer process

IN Shinohara, Satoru

PA Sony Corp., Japan

SO Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 687574	A2	19951220	EP 1995-109361	19950616
	EP 687574	A3	19960313		
	EP 687574	B1	19980916		
	R: DE, FR, GB				
	JP 08002126	A	19960109	JP 1994-159238	19940617
	US 5672561	A	19970930	US 1995-474149	19950609
PRAI	JP 1994-159238	A	19940617		

L17 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1994:496064 CAPLUS

DN 121:96064

OREF 121:17035a,17038a

TI Photosensitive composition for photosensitive printing plate

IN Sekya, Toshuki

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 30 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05165206	A	19930702	JP 1991-333542	19911217
PRAI	JP 1991-333542		19911217		

L17 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1982:532310 CAPLUS

DN 97:132310

OREF 97:21899a,21902a

TI Intermediate films for safety glass

PA Kuraray Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57077051	A	19820514	JP 1980-154141	19801031
	JP 02010785	B	19900309		
PRAI	JP 1980-154141		19801031		

L17 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1951:11991 CAPLUS

DN 45:11991

OREF 45:2122a-b

TI Organopolysiloxane-insulated copper conductor

IN Mathes, Kenneth N.

PA General Electric Co.

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2523037		19500919	US 1946-688319	19460803

=> d 1-13 all

L17 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:769897 CAPLUS

DN 149:55302

ED Entered STN: 26 Jun 2008

TI Modified polyvinyl acetal resins  
and their coating, electrically conductive, and ceramic pastes

IN Ichitani, Motokuni

PA Sekisui Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13pp.

CODEN: JKXXAF

DT Patent

LA Japanese

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

## FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008143922	A	20080626	JP 2006-328828	20061205
PRAI	JP 2006-328828		20061205		

## CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 2008143922	IPCI	C08F0008-28 [I,A]; C08F0008-00 [I,C*]; H01B0001-22 [I,A]; C09D0005-24 [I,A]; C09D0129-14 [I,A]; C09D0129-00 [I,C*]
		FTERM	4J038/CE061; 4J038/HA066; 4J038/HA186; 4J038/HA216; 4J038/HA316; 4J038/HA436; 4J038/HA466; 4J038/KA06; 4J038/NA20; 4J038/PB09; 4J100/AA02Q; 4J100/AA02R; 4J100/AD02S; 4J100/AF15T; 4J100/AF16T; 4J100/AG02P; 4J100/AG03P; 4J100/AG04P; 4J100/AG06P; 4J100/AJ02Q; 4J100/AJ09Q; 4J100/AJ10Q; 4J100/AK08S; 4J100/AK20S; 4J100/AK32Q; 4J100/AM02Q; 4J100/AM15Q; 4J100/BA03H; 4J100/BA03T; 4J100/BA16H; 4J100/BA16Q; 4J100/BC43T; 4J100/BC59H; 4J100/CA04; 4J100/CA05; 4J100/CA31; 4J100/DA30; 4J100/DA32; 4J100/DA33; 4J100/HA09; 4J100/HA43; 4J100/HB39; 4J100/HC17; 4J100/HC18; 4J100/HC19; 4J100/HC20; 4J100/HE12; 4J100/JA01; 4J100/JA44; 4J100/JA45; 5G301/DA03; 5G301/DA05; 5G301/DA06; 5G301/DA10; 5G301/DA11; 5G301/DA12; 5G301/DA42; 5G301/DD01

AB The invention relates to title resins, useful for multilayer ceramic capacitors, with content of ethylene, pendant OH, and pendant CO<sub>2</sub>H, resp., 1-20, 15-40, and 0.01-10 mol% and degree of saponification and acetalization, resp., ≥80 and 40-80 mol% manufactured by acetalization of modified vinyl alc. polymers with aldehydes. Thus, a conductive paste containing a modified polyvinyl butyral manufactured from a saponified ethylene-vinyl acetate

copolymer and a saponified itaconic acid-vinyl acetate copolymer showed good screen printability.

ST screen printability multilayer ceramic capacitor polyvinyl butyral; saponified ethylene vinyl acetate copolymer polyvinyl butyral; polyvinyl butyral saponified itaconic acid vinyl acetate copolymer

IT Electrically conductive pastes

(modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT Polyvinyl butyrals

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT Aldehydes, reactions

RL: RCT (Reactant); RACT (Reactant or reagent) (modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT Ceramic capacitors

(multilayer; modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT Ceramic coatings

Coating materials

(pastes; modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT 24937-78-8DP, Ethylene-vinyl acetate copolymer, saponified, acetal with butyraldehyde 43158-52-7DP, Itaconic acid-vinyl acetate copolymer, saponified, acetal with butyraldehyde

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

IT 75-07-0, Acetaldehyde, reactions 123-72-8, Butyraldehyde  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(modified polyvinyl butyral conductive and ceramic pastes for multilayer ceramic capacitors)

L17 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:1088833 CAPLUS

DN 145:407699

ED Entered STN: 19 Oct 2006

TI Sublimation-type thermal-transfer printing material and image receiving sheet

IN Shiota, Satoshi; Yoshida, Kazuya; Yuki, Masahiro; Takahashi, Toru

PA Dainippon Printing Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 23pp.

CODEN: JKXXAF

DT Patent

LA Japanese

CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

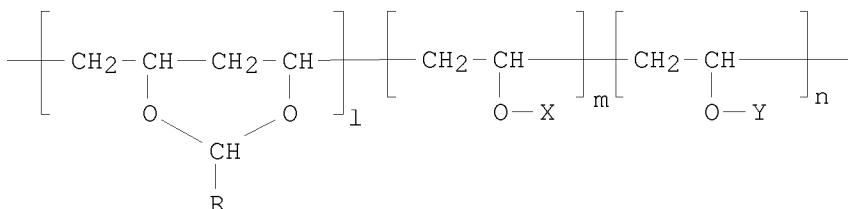
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 2006281446	A	20061019	JP 2005-100444	20050331
PRAI JP 2005-100444		20050331		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
-----	-----	-----
JP 2006281446	IPCI	B41M0005-382 [I,A]; B41M0005-50 [I,A]; B41M0005-52 [I,A]; B41M0005-392 [I,A]; B41M0005-26 [I,C*]
	IPCR	B41M0005-26 [I,C]; B41M0005-382 [I,A]; B41M0005-392 [I,A]; B41M0005-50 [I,C]; B41M0005-50 [I,A]; B41M0005-52 [I,A]
	FTERM	2H111/BA03; 2H111/BA53; 2H111/BA55; 2H111/CA03; 2H111/CA30; 2H111/CA33

GI



I

AB The sheet comprises a support having a dye receiving layer containing modified polyvinyl acetal resin I (X = H, acetyl; Y = urethane group OCONHR'; R' = organic group; 50 < l < 85; 10 < m < 50; 0 < n < 30 mol%). The material comprises the sheet and sublimation thermal-transfer printing material with dye layer containing polyester with bisphenol skeleton. The material is suited for high speed printing, giving high d. images without adhesion of the material and the sheet.  
ST thermal transfer printing image receptor polyvinyl acetal; sublimation thermal transfer material polyester dye layer  
IT Polyesters, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (dye layer; sublimation-type thermal transfer printing material and image receiving sheet)

IT Polyvinyl acetals  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (modified, dye receiving layer; sublimation-type thermal transfer printing material and image receiving sheet)

IT Thermal-transfer printing materials  
 (receptors; sublimation-type thermal transfer printing material and image receiving sheet)

IT Thermal-transfer printing materials  
 (sublimation; sublimation-type thermal transfer printing material and image receiving sheet)

IT 29964-38-3P 116164-24-0P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (dye layer; sublimation-type thermal transfer printing material and image receiving sheet)

IT 112-96-9DP, Octadecyl isocyanate, reaction products with polyvinyl acetal 4747-74-4DP, reaction products with polyvinyl acetal  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (dye receiving layer; sublimation-type thermal transfer printing material and image receiving sheet)

L17 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2006:30448 CAPLUS  
 DN 144:130575  
 ED Entered STN: 12 Jan 2006  
 TI Soft-modified polyvinyl acetal resins  
 IN Lumpp, Andreas  
 PA Wacker Polymer Systems GmbH & Co. KG, Germany  
 SO PCT Int. Appl., 14 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 IC ICM C08F008-28  
 ICS C08F008-14; C08F218-10; C08F216-06  
 CC 42-12 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 35

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006002831	A1	20060112	WO 2005-EP6819	20050623
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
DE	102004031969	A1	20060216	DE 2004-102004031969	20040701
EP	1763544	A1	20070321	EP 2005-768177	20050623
EP	1763544	B1	20070815		

R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR			
CN 1961008	A	20070509	CN 2005-80017493	20050623
AT 370166	T	20070915	AT 2005-768177	20050623
JP 2008504415	T	20080214	JP 2007-518514	20050623
TW 265933	B	20061111	TW 2005-94121730	20050628
US 20070260021	A1	20071108	US 2006-570145	20061207
IN 2006CN04820	A	20071005	IN 2006-CN4820	20061229
PRAI DE 2004-102004031969	A	20040701		
WO 2005-EP6819	W	20050623		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2006002831	ICM	C08F008-28
	ICS	C08F008-14; C08F218-10; C08F216-06
	IPCI	C08F0008-28 [ICM, 7]; C08F0008-14 [ICS, 7]; C08F0008-00 [ICS, 7, C*]; C08F0218-10 [ICS, 7]; C08F0218-00 [ICS, 7, C*]; C08F0216-06 [ICS, 7]; C08F0216-00 [ICS, 7, C*]
	IPCR	C08F0008-00 [I, C*]; C08F0008-14 [I, A]; C08F0008-28 [I, A]; C08F0216-00 [I, C*]; C08F0216-06 [I, A]; C08F0218-00 [I, C*]; C08F0218-10 [I, A]
	ECLA	C08F008/12+218/08; C08F008/12+218/10; C08F008/28+216/06; M08F; M08F
DE 102004031969	IPCI	C08F0016-38 [I, A]; C08F0016-06 [I, A]; C08F0016-00 [I, C*]; C08F0020-10 [I, A]; C08F0020-00 [I, C*]; C08F0018-08 [I, A]; C08F0018-00 [I, C*]; C08F0008-12 [I, A]; C08F0008-14 [I, A]; C08F0008-00 [I, C*]; H04R0007-00 [I, A]; B65D0065-42 [I, A]; B65D0065-38 [I, C*]; C09D0011-02 [I, A]; C09D0129-14 [I, A]; C09D0129-06 [I, A]; C09D0129-00 [I, C*]; C09D0131-04 [I, A]; C09D0131-00 [I, C*]
	IPCR	B65D0065-38 [I, C]; B65D0065-42 [I, A]; C08F0008-00 [I, C]; C08F0008-12 [I, A]; C08F0008-14 [I, A]; C08F0008-28 [I, A]; C08F0016-00 [I, C]; C08F0016-06 [I, A]; C08F0016-38 [I, A]; C08F0018-00 [I, C]; C08F0018-08 [I, A]; C08F0020-00 [I, C]; C08F0020-10 [I, A]; C08F0216-00 [I, C*]; C08F0216-06 [I, A]; C08F0218-00 [I, C*]; C08F0218-10 [I, A]; C09D0011-02 [I, A]; C09D0129-00 [I, C]; C09D0129-06 [I, A]; C09D0129-14 [I, A]; C09D0131-00 [I, C]; C09D0131-04 [I, A]; H04R0007-00 [I, A]
EP 1763544	ECLA	C08F008/12+218/08; C08F008/12+218/10; C08F008/28+216/06
	IPCI	C08F0008-28 [I, A]; C08F0008-14 [I, A]; C08F0218-10 [I, A]; C08F0216-06 [I, A]; C08F0008-00 [I, C]; C08F0216-00 [I, C]; C08F0218-00 [I, C]
	IPCR	C08F0008-00 [I, C]; C08F0008-28 [I, A]; C08F0008-14 [I, A]; C08F0216-00 [I, C]; C08F0216-06 [I, A]; C08F0218-00 [I, C]; C08F0218-10 [I, A]
	ECLA	C08F008/12+218/08; C08F008/12+218/10; C08F008/28+216/06; M08F; M08F
CN 1961008	IPCI	C08F0008-28 [I, A]; C08F0008-14 [I, A]; C08F0008-00 [I, C*]; C08F0218-10 [I, A]; C08F0218-00 [I, C*]; C08F0216-06 [I, A]; C08F0216-00 [I, C*]
	IPCR	C08F0008-00 [I, C]; C08F0008-28 [I, A]; C08F0008-14 [I, A]; C08F0216-00 [I, C*]; C08F0216-06 [I, A]; C08F0218-00 [I, C*]; C08F0218-10 [I, A]
	ECLA	C08F008/12+218/08; C08F008/12+218/10; C08F008/28+216/06; M08F; M08F
AT 370166	IPCI	C08F0008-00 [I, C]; C08F0008-28 [I, A]; C08F0008-14 [I, A]; C08F0216-00 [I, C]; C08F0216-06 [I, A]; C08F0218-00 [I, C]; C08F0218-10 [I, A]

	IPCR	C08F0008-00 [I,C]; C08F0008-28 [I,A]; C08F0008-14 [I,A]; C08F0216-00 [I,C]; C08F0216-06 [I,A]; C08F0218-00 [I,C]; C08F0218-10 [I,A]
	ECLA	C08F008/12+218/08; C08F008/12+218/10; C08F008/28+216/06; M08F; M08F
JP 2008504415	IPCI	C08F0008-28 [I,A]; C08F0008-12 [I,A]; C08F0008-00 [I,C*]; C09D0011-10 [I,A]; C09D0129-14 [I,A]; C09D0129-00 [I,C*]; C09D0005-00 [I,A]
	IPCR	C08F0008-00 [I,C]; C08F0008-28 [I,A]; C08F0008-12 [I,A]; C08F0008-14 [I,A]; C08F0216-00 [I,C*]; C08F0216-06 [I,A]; C08F0218-00 [I,C*]; C08F0218-10 [I,A]; C09D0005-00 [I,C]; C09D0005-00 [I,A]; C09D0011-10 [I,C]; C09D0011-10 [I,A]; C09D0129-00 [I,C]; C09D0129-14 [I,A]
	ECLA	C08F008/12+218/08; C08F008/12+218/10; C08F008/28+216/06; M08F; M08F
	FTERM	4J038/CE061; 4J038/JA19; 4J038/KA06; 4J039/AD06; 4J039/AD07; 4J039/BC07; 4J039/BC08; 4J039/BE12; 4J100/AF15P; 4J100/AF17P; 4J100/AG04S; 4J100/AG06R; 4J100/AG24Q; 4J100/AJ02T; 4J100/BA16P; 4J100/BA16Q; 4J100/BA16R; 4J100/BA16S; 4J100/BA27P; 4J100/BA27Q; 4J100/BA27R; 4J100/BA27S; 4J100/CA03; 4J100/CA06; 4J100/CA31; 4J100/DA25; 4J100/HA09; 4J100/HA56; 4J100/HC27; 4J100/JA05; 4J100/JA07
TW 265933	IPCI	C08F [ICM,7]
	IPCR	C08F0016-00 [I,C]; C08F0016-38 [I,A]; B65D0065-38 [I,C]; B65D0065-42 [I,A]; C08F0008-00 [I,C]; C08F0008-12 [I,A]; C09D0129-00 [I,C]; C09D0129-14 [I,A]
US 20070260021	IPCI	C08F0002-06 [I,A]; C08F0002-04 [I,C*]
	NCL	525/451.000
IN 2006CN04820	IPCI	C08F0218-10 [ICM,7]; C08F0218-00 [ICM,7,C*]
AB	The invention relates to soft-modified polyvinyl acetal resins which can be obtained by saponification of copolymers of vinyl acetate and one or several tertiary vinyl esters of C9-15 $\alpha$ -branched monocarboxylic acids containing 5 - 60 percent by weight tertiary vinyl ester, in relation to the total weigh of the monomers, followed by acetalization of the saponification products which comprise vinyl	
alc.	with the aid of one or several C1-6 aldehydes.	
ST	polyvinyl acetal resin acetalization tertiary vinyl ester monocarboxylic acid	
IT	Primers (paints) (anticorrosive; soft-modified polyvinyl acetal resins)	
IT	Sound and Ultrasound (films; soft-modified polyvinyl acetal resins)	
IT	Binders (for ceramics or glass fibers; soft-modified polyvinyl acetal resins)	
IT	Inks (printing; soft-modified polyvinyl acetal resins)	
IT	Acetalization Ceramics Plastic films Saponification (soft-modified polyvinyl acetal resins)	
IT	Polyvinyl acetals RL: IMF (Industrial manufacture); PREP (Preparation) (soft-modified polyvinyl acetal	

resins)

IT Glass fibers, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (soft-modified polyvinyl acetal  
 resins)

IT 123-72-8DP, Butyraldehyde, saponifying polyvinyl acetals 9070-52-4DP, VeoVa  
 10-vinyl acetate copolymer, saponified with butyraldehyde 103937-64-0DP,  
 VeoVa 9-vinyl acetate copolymer, saponified with butyraldehyde  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (soft-modified polyvinyl acetal  
 resins)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Wacker-Chemie Gmbh; EP 1180529 A 2002 CAPLUS  
 (2) Wacker Polymer Systems Gmbh & Co Kg; DE 10242417 A1 2004 CAPLUS

L17 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:74133 CAPLUS  
 DN 142:156879  
 ED Entered STN: 28 Jan 2005  
 TI Modified polyvinyl acetal binder resin for coating paste with good  
 applicability  
 IN Ichitani, Motokuni; Ii, Daizo; Ochitani, Yukio; Takahashi, Hideyuki;  
 Sakashita, Katsuaki  
 PA Sekisui Chemical Co., Ltd., Japan  
 SO PCT Int. Appl., 39 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 IC ICM C08F008-48  
 ICS C09D129-14  
 CC 37-3 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 38, 74, 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005007710	A1	20050127	WO 2004-JP9127	20040628
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2005089695	A	20050407	JP 2003-328162	20030919
	JP 2005268055	A	20050929	JP 2004-79082	20040318
	JP 2005303008	A	20051027	JP 2004-117062	20040412
	JP 2005298792	A	20051027	JP 2004-190354	20040628
	JP 4146823	B2	20080910		
	EP 1637546	A1	20060322	EP 2004-746596	20040628
	R: BE, DE, FR, GB, IT				
	CN 1809598	A	20060726	CN 2004-80017415	20040628
	JP 2005298793	A	20051027	JP 2004-233469	20040810
	JP 2005113133	A	20050428	JP 2004-270142	20040916
	US 20060192180	A1	20060831	US 2005-561971	20051222
PRAI	JP 2003-183187	A	20030626		
	JP 2003-328162	A	20030919		
	JP 2003-328163	A	20030919		

JP 2004-79082	A	20040318
JP 2004-79083	A	20040318
JP 2004-117062	A	20040412
WO 2004-JP9127	W	20040628

CLASS	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2005007710		ICM	C08F008-48
		ICS	C09D129-14
		IPCI	C08F0008-48 [ICM, 7]; C08F0008-00 [ICM, 7,C*]; C09D0129-14 [ICS, 7]; C09D0129-00 [ICS, 7,C*]
		IPCR	C08F0008-00 [I,C*]; C08F0008-28 [I,A]; C08F0008-48 [I,A]; C09D0129-00 [I,C*]; C09D0129-14 [I,A]
		ECLA	C08F008/28+216/06
JP 2005089695		IPCI	C08F0008-28 [ICM, 7]; C08F0008-00 [ICM, 7,C*]; C03C0008-16 [ICS, 7]; C03C0008-00 [ICS, 7,C*]; C08F0016-06 [ICS, 7]; C08F0016-00 [ICS, 7,C*]; C08K0003-40 [ICS, 7]; C08K0003-00 [ICS, 7,C*]; C08L0029-14 [ICS, 7]; C08L0029-00 [ICS, 7,C*]; C09J0129-14 [ICS, 7]; C09J0129-00 [ICS, 7,C*]; H01J0011-02 [ICS, 7]
		IPCR	C03C0008-00 [I,C*]; C03C0008-16 [I,A]; C08F0008-00 [I,C*]; C08F0008-28 [I,A]; C08F0016-00 [I,C*]; C08F0016-06 [I,A]; C08K0003-00 [I,C*]; C08K0003-40 [I,A]; C08L0029-00 [I,C*]; C08L0029-14 [I,A]; C09J0129-00 [I,C*]; C09J0129-14 [I,A]; H01J0011-02 [I,A]; H01J0011-02 [I,C*]
		FTERM	4G062/AA09; 4G062/BB01; 4G062/MM23; 4G062/NN32; 4G062/PP14; 4J002/BE031; 4J002/DL006; 4J002/GJ01; 4J040/DD071; 4J040/HA346; 4J040/JA05; 4J040/KA03; 4J040/KA23; 4J040/LA06; 4J040/LA07; 4J040/MA05; 4J040/NA19; 4J100/AA02Q; 4J100/AD02S; 4J100/AF15R; 4J100/AG04P; 4J100/BA03H; 4J100/BC59H; 4J100/CA31; 4J100/HA09; 4J100/HA43; 4J100/HC18; 4J100/HC19; 4J100/JA03; 5C040/GF18; 5C040/KA07; 5C040/KA08
JP 2005268055		IPCI	H01B0001-22 [ICM, 7]; H05K0003-12 [ICS, 7]; H01G0004-12 [ICS, 7]
		IPCR	H01B0001-22 [I,A]; H01B0001-22 [I,C*]; H01G0004-12 [N,A]; H01G0004-12 [N,C*]; H05K0003-12 [I,A]; H05K0003-12 [I,C*]
		FTERM	5E001/AB03; 5E001/AC09; 5E001/AH01; 5E001/AJ01; 5E343/AA23; 5E343/BB23; 5E343/BB24; 5E343/BB25; 5E343/BB44; 5E343/BB48; 5E343/BB49; 5E343/BB76; 5E343/DD03; 5E343/DD64; 5E343/FF02; 5E343/FF11; 5E343/GG02; 5E343/GG08; 5G301/DA10; 5G301/DA42; 5G301/DD01
JP 2005303008		IPCI	H01G0004-12 [ICM, 7]; B28B0001-30 [ICS, 7]; C04B0035-00 [ICS, 7]; C04B0035-632 [ICS, 7]; C04B0035-63 [ICS, 7,C*]; B28B0011-00 [ICS, 7]
		IPCR	B28B0001-30 [I,A]; B28B0001-30 [I,C*]; B28B0011-00 [N,A]; B28B0011-00 [N,C*]; C04B0035-00 [I,A]; C04B0035-00 [I,C*]; C04B0035-63 [I,C*]; C04B0035-632 [I,A]; H01G0004-12 [I,A]; H01G0004-12 [I,C*]
		FTERM	4G030/AA07; 4G030/AA10; 4G030/AA16; 4G030/AA17; 4G030/AA32; 4G030/AA36; 4G030/AA37; 4G030/AA47; 4G030/AA51; 4G030/AA52; 4G030/BA09; 4G030/GA14; 4G030/GA17; 4G030/PA11; 4G030/PA21; 4G052/DA05; 4G052/DA08; 4G052/DB12; 4G052/DC06; 4G055/AA08; 4G055/AA10; 4G055/AC01; 4G055/AC09; 4G055/BA22; 4G055/BA35; 4G055/BA43; 5E001/AB06; 5E001/AH01; 5E001/AJ02
JP 2005298792		IPCI	H01B0001-22 [I,A]; C08F0216-38 [I,A]; C08F0216-00

		[I,C*]; C08L0029-14 [I,A]; C08L0029-00 [I,C*]; C08K0003-00 [I,A]; C08K0005-00 [I,A]
	IPCR	C08F0216-00 [I,C*]; C08F0216-38 [I,A]; C08K0003-00 [I,A]; C08K0003-00 [I,C*]; C08K0005-00 [I,A]; C08L0029-00 [I,C*]; C08L0029-14 [I,A]; H01B0001-22 [I,A]; H01B0001-22 [I,C*]; H01G0004-12 [N,A]; H01G0004-12 [N,C*]; H01G0004-30 [N,A]; H01G0004-30 [N,C*]
	FTERM	4J002/BE061; 4J002/DA076; 4J002/DA106; 4J002/DA116; 4J002/EF027; 4J002/EF037; 4J002/EF057; 4J002/EH158; 4J002/EN027; 4J002/FD116; 4J002/GQ02; 4J002/HA08; 4J100/AA00S; 4J100/AA01S; 4J100/AA02S; 4J100/AA03S; 4J100/AD02Q; 4J100/AF15P; 4J100/AG02R; 4J100/AG03R; 4J100/AG04R; 4J100/CA06; 4J100/JA45; 5E001/AB03; 5E001/AC09; 5E001/AH01; 5E001/AJ01; 5E082/AA01; 5E082/AB03; 5E082/BC32; 5E082/BC33; 5E082/BC40; 5E082/EE04; 5E082/EE23; 5E082/EE35; 5E082/FF05; 5E082/FG04; 5E082/FG26; 5E082/FG46; 5E082/FG54; 5E082/KK01; 5E082/LL02; 5E082/MM22; 5E082/MM24; 5E082/PP03; 5G301/DA10; 5G301/DA42; 5G301/DD01
EP 1637546	IPCI	C08F0008-48 [ICM,7]; C08F0008-00 [ICM,7,C*]; C09D0129-14 [ICS,7]; C09D0129-00 [ICS,7,C*]
	IPCR	C08F0008-00 [I,C*]; C08F0008-28 [I,A]; C08F0008-48 [I,A]; C09D0129-00 [I,C*]; C09D0129-14 [I,A]
	ECLA	C08F008/28+216/06
CN 1809598	IPCI	C08F0008-48 [I,A]; C08F0008-00 [I,C*]; C09D0129-14 [I,A]; C09D0129-00 [I,C*]
JP 2005298793	IPCI	C08L0029-14 [ICM,7]; C08L0029-00 [ICM,7,C*]; C08F0016-38 [ICS,7]; C08F0016-00 [ICS,7,C*]; C08K0005-04 [ICS,7]; C08K0005-00 [ICS,7,C*]
	IPCR	C08F0016-00 [I,C*]; C08F0016-38 [I,A]; C08K0005-00 [I,C*]; C08K0005-04 [I,A]; C08L0029-00 [I,C*]; C08L0029-14 [I,A]
	FTERM	4J002/BE061; 4J002/CH052; 4J002/DA076; 4J002/DA086; 4J002/DB006; 4J002/EF037; 4J002/EF058; 4J002/EG037; 4J002/EH057; 4J002/EH157; 4J002/EN028; 4J002/EP018; 4J002/FD116; 4J002/GQ02; 4J100/AA02Q; 4J100/AD02P; 4J100/AF15P; 4J100/BA10H; 4J100/CA06; 4J100/CA31; 4J100/HA09; 4J100/HA56; 4J100/HA61; 4J100/HB25; 4J100/HC19; 4J100/JA45
JP 2005113133	IPCI	C09D0011-10 [ICM,7]; H01B0001-22 [ICS,7]; H01B0003-00 [ICS,7]; H05K0003-12 [ICS,7]
	IPCR	C09D0011-10 [I,A]; C09D0011-10 [I,C*]; H01B0001-22 [I,A]; H01B0001-22 [I,C*]; H01B0003-00 [I,A]; H01B0003-00 [I,C*]; H05K0003-12 [I,A]; H05K0003-12 [I,C*]
	FTERM	4J039/AD07; 4J039/BA06; 4J039/BA07; 4J039/BC03; 4J039/BC07; 4J039/BC18; 4J039/BC19; 4J039/BC20; 4J039/BC26; 4J039/BE29; 4J039/CA04; 4J039/EA24; 4J039/EA43; 4J039/EA48; 4J039/FA04; 4J039/FA06; 4J039/GA10; 5E343/BB23; 5E343/BB24; 5E343/BB25; 5E343/BB44; 5E343/BB48; 5E343/BB49; 5E343/BB72; 5E343/CC17; 5E343/DD03; 5E343/GG08; 5G301/DA10; 5G301/DA42; 5G301/DD01; 5G303/AA10; 5G303/AB20; 5G303/BA07; 5G303/CA01; 5G303/CA02; 5G303/CA09; 5G303/CB01; 5G303/CB03; 5G303/CB35
US 20060192180	IPCI	H01B0001-12 [I,A]
	NCL	252/500.000
	ECLA	C08F008/28+216/06

AB A modified polyvinyl acetal with excellent dispersibility for inorg. powders is useful for a binder resin for coating pastes, a conductive paste, a ceramic paste or a glass paste for use in, e.g., display panel or

semiconductor device fabrication, etc. The modified polyvinyl acetal comprises a vinyl ester unit, a vinyl alc. unit, an  $\alpha$ -olefin unit and an acetal unit. Thus, acetalizing a saponified poly(vinyl alc.) having ethylene unit content 10 mol% and saponification degree 88 mol% with Bu aldehyde

gave a modified polyvinyl acetal resin which was kneaded with 2020 SS (Ni powder) and  $\alpha$ -terpineol to give a conducting paste.

ST elec conducting paste manuf binder modified vinyl acetal resin

IT Aluminoborosilicate glasses

RL: MOA (Modifier or additive use); USES (Uses)

(lead aluminoborosilicate, powder; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

IT Electrically conductive pastes

Semiconductor device fabrication

(manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

IT Polyvinyl acetals

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP

(Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(paste containing S-Lec BM-S; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

IT 7440-02-0, 2020SS, uses

RL: MOA (Modifier or additive use); USES (Uses)

(2020SS, conductive powder; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

IT 12047-27-7, BT 03, uses

RL: MOA (Modifier or additive use); USES (Uses)

(ceramic powder; manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

IT 24937-78-8DP, EVA, saponified, acetal derivs.

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP

(Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of modified polyvinyl acetal binder resin for coating paste with good dispersibility)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Konica Corp; JP 2002283699 A 2002 CAPLUS

(2) Kuraray Co Ltd; JP 63-79741 A 1988 CAPLUS

(3) Kuraray Co Ltd; JP 63-79752 A 1988 CAPLUS

(4) Kuraray Co Ltd; EP 1384731 A1 2004 CAPLUS

(5) Kuraray Co Ltd; US 20040024137 A1 2004

(6) Kuraray Co Ltd; JP 200468013 A 2004

L17 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:262135 CAPLUS

DN 138:274120

ED Entered STN: 04 Apr 2003

TI Modified polyvinyl acetal resin

IN Miyake, Yoshitaka; Sawada, Masakazu

PA Sekisui Chemical Co., Ltd., Japan

SO PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM H01M010-40

ICS H01M014-00; H01G009-00; H01B001-06; H01L031-04; G01N027-46; C08G065-04

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)

## FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003028143	A1	20030403	WO 2002-JP9669	20020920
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002330316	A1	20030407	AU 2002-330316	20020920
	JP 2003183325	A	20030703	JP 2002-274605	20020920
	JP 4133158	B2	20080813		
	EP 1429400	A1	20040616	EP 2002-765606	20020920
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	US 20040260020	A1	20041223	US 2004-490037	20040730
	JP 2008156632	A	20080710	JP 2007-318385	20071210
PRAI	JP 2001-289367	A	20010921		
	JP 2001-289368	A	20010921		
	JP 2002-274605	A3	20020920		
	WO 2002-JP9669	W	20020920		

## CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2003028143	ICM	H01M010-40
		ICS	H01M014-00; H01G009-00; H01B001-06; H01L031-04; G01N027-46; C08G065-04
		IPCI	H01M0010-40 [ICM, 7]; H01M0010-36 [ICM, 7, C*]; H01M0014-00 [ICS, 7]; H01G0009-00 [ICS, 7]; H01B0001-06 [ICS, 7]; H01L0031-04 [ICS, 7]; G01N0027-46 [ICS, 7]; C08G0065-04 [ICS, 7]; C08G0065-00 [ICS, 7, C*]
		IPCR	C08F0008-00 [I, C*]; C08F0008-28 [I, A]; H01M0002-16 [N, C*]; H01M0002-16 [N, A]; H01M0004-62 [N, C*]; H01M0004-62 [N, A]; H01M0006-00 [I, C*]; H01M0006-22 [I, A]; H01M0010-36 [I, C*]; H01M0010-40 [I, A]
		ECLA	C08F008/28+216/06; H01M006/22; H01M010/40B; T01M; T01M; T01M; T01M; T01M
	AU 2002330316	IPCI	H01M0010-40 [ICM, 7]; H01M0010-36 [ICM, 7, C*]; H01M0014-00 [ICS, 7]; H01G0009-00 [ICS, 7]; H01B0001-06 [ICS, 7]; H01L0031-04 [ICS, 7]; C08G0065-04 [ICS, 7]; C08G0065-00 [ICS, 7, C*]
	JP 2003183325	IPCI	C09D0011-10 [I, A]; C09D0129-14 [I, A]; C09D0129-00 [I, C*]; C09J0129-14 [I, A]; C09J0129-00 [I, C*]; G03C0001-498 [I, A]; C08F0008-48 [I, A]; C08F0008-00 [I, C*]
		IPCR	C04B0035-63 [I, C*]; C04B0035-632 [I, A]; C04B0035-622 [I, C*]; C04B0035-622 [I, A]; C08F0008-00 [I, C*]; C08F0008-48 [I, A]; C08L0029-00 [I, C*]; C08L0029-14 [I, A]
	EP 1429400	IPCI	H01M0002-00 [ICM, 7]
		IPCR	H01M0002-00 [I, A]; C08F0008-00 [I, C]; C08F0008-28 [I, A]; C08F0216-00 [I, C]; C08F0216-38 [I, A]; H01M0002-00 [I, C]; H01M0002-16 [N, C*]; H01M0002-16 [N, A]; H01M0004-62 [N, C*]; H01M0004-62 [N, A]; H01M0006-00 [I, C*]; H01M0006-22 [I, A]; H01M0010-36 [I, C*]; H01M0010-40 [I, A]
		ECLA	H01M006/22; H01M010/40B

US 20040260020 IPCI C08F0008-00 [ICM, 7]  
 IPCR C08F0008-00 [I,C\*]; C08F0008-28 [I,A]; H01M0002-16  
 [N,C\*]; H01M0002-16 [N,A]; H01M0004-62 [N,C\*];  
 H01M0004-62 [N,A]; H01M0006-00 [I,C\*]; H01M0006-22  
 [I,A]; H01M0010-36 [I,C\*]; H01M0010-40 [I,A]  
 NCL 525/061.000  
 ECLA C08F008/28+216/06; H01M006/22; H01M010/40B; T01M; T01M;  
 T01M; T01M; T01M

JP 2008156632 IPCI C08L0029-14 [I,A]; C08L0029-00 [I,C\*]; C08K0005-103  
 [I,A]; C08K0005-00 [I,C\*]; C08K0003-00 [I,A];  
 C04B0035-622 [I,A]; C04B0035-632 [I,A]; C04B0035-63  
 [I,C\*]; H01G0004-12 [I,A]; H01G0004-30 [I,A]  
 FTERM 4G030/AA10; 4G030/AA16; 4G030/BA09; 4G030/CA08;  
 4G030/GA09; 4G030/GA11; 4G030/GA14; 4G030/GA15;  
 4G030/GA17; 4G030/PA22; 4J002/CB001; 4J002/DE076;  
 4J002/DE086; 4J002/DE096; 4J002/DE106; 4J002/DE136;  
 4J002/DE146; 4J002/DE156; 4J002/DJ006; 4J002/DL006;  
 4J002/DM006; 4J002/EH047; 4J002/EW007; 4J002/FD016;  
 4J002/FD027; 4J002/GQ01; 4J002/HA08; 5E001/AB03;  
 5E001/AE02; 5E001/AE03; 5E001/AF06; 5E001/AH01;  
 5E001/AJ02; 5E082/AB03; 5E082/BB07; 5E082/EE04;  
 5E082/GG10; 5E082/MM22; 5E082/MM23; 5E082/MM24

AB The resin is obtained by acetalizing a modified polyvinyl alc. containing ethylene units randomly arranged in the main chain and having ethylene content 1-20 mol% and a degree of saponification  $\geq$  80 mol%. The resin which is excellent in flexibility, adhesion to resin substrates in a high-humidity atmospheric, heat resistance, thermal decomposability, moisture resistance, and toughness, has a low oxygen permeability and moderate adhesive properties, gives a low-viscosity solution having excellent long-term viscosity stability; and is used for adhesive compns., inks, coating material compns., heat-developable photosensitive materials, slurry compns. for ceramic green sheets, and the ceramic green sheets.

ST modified polyvinyl acetal resin  
 ethylene content sapon degree; acetalization polyvinyl alc aldehyde;  
 adhesive ink heat developable photosensitive mat ceramic green sheet

IT Adhesives  
 (adhesive compns. containing modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT Aminoplasts  
 Epoxy resins, uses  
 Phenolic resins, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (adhesive compns. containing modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT Polyvinyl acetals  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (characteristics and manufacture of modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT Inks  
 (inks containing modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT 9003-08-1, Melamine resin  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (adhesive compns. containing modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT 9002-89-5, Poly(vinyl alcohol)  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical

process); PROC (Process)  
 (characteristics and manufacture of modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT 99-98-9, N,N-Dimethyl-p-phenylenediamine 2489-05-6, Silver behenate 7446-14-2, Lead sulfate 9003-39-8, Polyvinylpyrrolidone 28279-38-1  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (heat-developable photosensitive materials containing modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT 75-07-0, Acetaldehyde, processes 123-72-8, n-Butylaldehyde  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (reaction products with acid modified poly(vinyl alcs.); characteristics and manufacture of modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT 7647-01-0, Hydrochloric acid, processes  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (reaction products with poly(vinyl alc.) and aldehydes; characteristics and manufacture of modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT 84-74-2, Dibutylphthalate 12047-27-7, Barium titanate, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (slurry compns. for ceramic green sheets containing modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Kuraray Co Ltd; JP 63-79741 A 1988 CAPLUS
- (2) Kuraray Co Ltd; JP 63-79752 A 1988 CAPLUS
- (3) Kuraray Co Ltd; JP 09-77822 A 1997 CAPLUS
- (4) Shingijutsu Kaihatsu Jigyodan; JP 62-59951 A 1987 CAPLUS
- (5) The Nippon Synthetic Chemical Industry Co Ltd; JP 48-32779 B1 1973 CAPLUS
- (6) The Nippon Synthetic Chemical Industry Co Ltd; JP 60-54967 A 1985 CAPLUS
- (7) Toyo Seikan Kaisha Ltd; JP 53-65386 A 1978 CAPLUS

L17 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2001:252997 CAPLUS

DN 134:282203

ED Entered STN: 10 Apr 2001

TI Curable resin compositions with good curability and film forming properties

IN Tanaka, Toshiyuki; Toda, Atsushi

PA Mitsubishi Chemical Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L101-00

ICS C08L029-14; C08L063-00; C09D004-02; C09D129-14; C09D163-00;  
 C09J004-02; C09J129-14; C09J163-00

CC 42-9 (Coatings, Inks, and Related Products)

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001098165	A	20010410	JP 2000-228828	20000728
	US 6555617	B1	20030429	US 2000-628321	20000728
	US 20030130435	A1	20030710	US 2002-290515	20021108
	US 6737474	B2	20040518		
PRAI	JP 1999-214935	A	19990729		

JP 1999-214936	A	19990729
JP 1999-216321	A	19990730
US 2000-628321	A1	20000728

CLASS	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2001098165	ICM	C08L101-00	
	ICS	C08L029-14; C08L063-00; C09D004-02; C09D129-14; C09D163-00; C09J004-02; C09J129-14; C09J163-00	
	IPCI	C08L0101-00 [ICM, 7]; C08L0029-14 [ICS, 7]; C08L0029-00 [ICS, 7, C*]; C08L0063-00 [ICS, 7]; C09D0004-02 [ICS, 7]; C09D0129-14 [ICS, 7]; C09D0129-00 [ICS, 7, C*]; C09D0163-00 [ICS, 7]; C09J0004-02 [ICS, 7]; C09J0129-14 [ICS, 7]; C09J0129-00 [ICS, 7, C*]; C09J0163-00 [ICS, 7]	
US 6555617	IPCR	C08L0101-00 [I, C*]; C08L0101-00 [I, A]; C08L0029-00 [I, C*]; C08L0029-14 [I, A]; C08L0063-00 [I, C*]; C08L0063-00 [I, A]; C09D0004-02 [I, C*]; C09D0004-02 [I, A]; C09D0129-00 [I, C*]; C09D0129-14 [I, A]; C09D0163-00 [I, C*]; C09D0163-00 [I, A]; C09J0004-02 [I, C*]; C09J0004-02 [I, A]; C09J0129-00 [I, C*]; C09J0129-14 [I, A]; C09J0163-00 [I, C*]; C09J0163-00 [I, A]	
US 20030130435	IPCI	C08L0029-02 [ICM, 7]; C08L0029-00 [ICM, 7, C*]; C08L0063-00 [ICS, 7]	
	IPCR	B32B0007-12 [I, C*]; B32B0007-12 [I, A]; C08G0059-00 [I, C*]; C08G0059-42 [I, A]; C08L0029-00 [I, C*]; C08L0029-14 [I, A]; C08L0035-00 [I, C*]; C08L0035-00 [I, A]; C08L0063-00 [N, C*]; C08L0063-00 [N, A]	
	NCL	525/061.000; 524/413.000; 524/428.000; 524/461.000; 524/480.000; 525/454.000; 525/525.000	
	ECLA	B32B007/12; C08G059/42N; C08L029/14+B4; C08L035/00; M08L	
AB	C08F0120-10 [ICM, 7]; C08F0120-00 [ICM, 7, C*]		
	B32B0007-12 [I, C*]; B32B0007-12 [I, A]; B32B0017-06 [I, C*]; B32B0017-10 [I, A]; C08G0059-00 [I, C*]; C08G0059-42 [I, A]; C08L0029-00 [I, C*]; C08L0029-14 [I, A]; C08L0035-00 [I, C*]; C08L0035-00 [I, A]; C08L0063-00 [N, C*]; C08L0063-00 [N, A]		
	NCL	525/330.300; 525/383.000; 525/386.000; 525/061.000; 524/413.000; 524/428.000; 524/461.000; 524/480.000; 525/454.000; 525/525.000	
	ECLA	B32B007/12; B32B017/10G28; C08G059/42N; C08L029/14+B4; C08L035/00; M08L	

AB The compns. comprise (A) curable resins, (B) curing catalysts and (C) curing agents from modified polyvinyl acetal resins having (a) acetal units derived from aromatic aldehydes, aralkyl aldehydes or/and aryl-containing alkenyl aldehydes, 0-85, (b) acetal units derived from HCHO or/and C1-10 alkyl aldehydes, 0-80, (c) unmodified vinyl alc. units, 0-50, (d) vinyl acetate units 0-30, and (e) dicarboxylic acid vinyl ester units 0-50 mol%, provided that (a+b) ≠ 0. Thus, mixing Gohsenol NL-05 (a polyvinyl alc.) 100 with phenylacetaldehyde 195, butylaldehyde 33, PhMe 584 and 35% HCl 13.2, heating to 58° over 1.5 h and at 58° for 5 h, cooling to 35°, adding Na acetate 18.26 dissolved in MeOH 535.6 g and working up gave a vinyl acetal resin which was esterified with phthalic anhydride, combined at 1.8 g with Epikote 828 1.2, MEK 9.0 and 1-(2-cyanoethyl)-2-ethyl-4-methylimidazole 0.036 g, coated on a Upilex R (polyimide) film and heated at 180° for 2 h to give a coat film with good adhesion.

ST epoxy resin coating phthalated vinyl acetal curing; dicarboxylic acid ester vinyl acetal resin curing epoxy resin

IT Polyvinyl butyrals

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); POF

(Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(S-Lec B-BL-S; mixed acetals, esters with dicarboxylic anhydride; curable resin compns. containing dicarboxylic acid-esterified mixed polyvinyl acetals with good curability and film forming properties)

IT Coating materials  
Crosslinking agents  
(curable resin compns. containing dicarboxylic acid-esterified mixed polyvinyl acetals with good curability and film forming properties)

IT Epoxy resins, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(curable resin compns. containing dicarboxylic acid-esterified mixed polyvinyl acetals with good curability and film forming properties)

IT Polyvinyl acetals  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(mixed cyclic ethers, esterified with dicarboxylic acids; curable resin compns. containing dicarboxylic acid-esterified mixed polyvinyl acetals with good curability and film forming properties)

IT 66-77-3DP, 1-Naphthaldehyde, mixed acetal derivs. with poly(vinyl alc.) and other aldehydes, esterified with dicarboxylic anhydride 85-44-9DP, Phthalic anhydride, esters with polyvinyl mixed acetals 100-52-7DP, Benzaldehyde, mixed acetal derivs. with poly(vinyl alc.) and other aldehydes, esterified with dicarboxylic anhydride, uses 104-53-0DP, Benzenepropanal, mixed acetal derivs. with poly(vinyl alc.) and other aldehydes, esterified with dicarboxylic anhydride 110-15-6DP, Succinic acid, esters with polyvinyl mixed acetals 110-16-7DP, Maleic acid, esters with polyvinyl mixed acetals 122-78-1DP, Phenylacetaldehyde, mixed acetal derivs. with poly(vinyl alc.) and other aldehydes, esterified with dicarboxylic anhydride 123-72-8DP, Butylaldehyde, mixed acetal derivs. with poly(vinyl alc.) and other aldehydes, esterified with dicarboxylic anhydride  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(curable resin compns. containing dicarboxylic acid-esterified mixed polyvinyl acetals with good curability and film forming properties)

IT 4687-94-9, Epoxy Ester 3000A 16969-10-1, Epoxy Ester M 600A  
25068-38-6, Epikote 828  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(curable resin compns. containing dicarboxylic acid-esterified mixed polyvinyl acetals with good curability and film forming properties)

IT 9002-89-5DP, Gohsenol NL-05, mixed acetal derivs., esterified with dicarboxylic anhydride  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(curable resin compns. with good curability and film forming properties)

IT 23996-25-0, 1-(2-Cyanoethyl)-2-ethyl-4-methylimidazole  
RL: CAT (Catalyst use); USES (Uses)  
(curing accelerators; curable resin compns. containing dicarboxylic acid-esterified mixed polyvinyl acetals with good curability and film forming properties)

L17 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 1999:449267 CAPLUS  
DN 131:95958  
ED Entered STN: 22 Jul 1999

TI Anisotropic electrically conductive film containing side chain-modified polyvinyl acetal resin  
 IN Sakurai, Makoto; Matsuse, Takahiro; Kotsubo, Hidefumi; Miura, Akio; Morimura, Yasuhiro  
 PA Bridgestone Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM H01B001-20  
 ICS H01B005-16; H05K003-32; G02F001-1345  
 CC 76-2 (Electric Phenomena)  
 Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11195325	A	19990721	JP 1998-12053	19980106
	JP 3922321	B2	20070530		
PRAI	JP 1998-12053			19980106	

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 11195325	ICM	H01B001-20
		ICS	H01B005-16; H05K003-32; G02F001-1345
		IPCI	H01B0001-20 [I,A]; H01B0005-16 [I,A]; H05K0003-32 [I,A]; G02F0001-1345 [N,A]; G02F0001-13 [N,C*]
		IPCR	G02F0001-13 [N,C*]; G02F0001-1345 [N,A]; H01B0001-20 [I,A]; H01B0001-20 [I,C*]; H01B0005-16 [I,A]; H01B0005-16 [I,C*]; H05K0003-32 [I,A]; H05K0003-32 [I,C*]

AB The film comprises a thermally or photo curable adhesive in which elec. conductive particles are dispersed. The adhesive contains a polyvinyl acetal resin manufactured by acetalification of polyvinyl alc., in which side chains of the resin are substituted with aliphatic unsatd. groups. The film shows elec. conductivity by applying pressure in its thickness direction. The film shows high heat and moisture resistance, excellent elec. conductivity, and durability.

ST anisotropic elec conductive film polyvinyl acetal; aliph substituted polyvinyl acetal conductive film; polyvinyl butyral modification elec conductive film; adhesive conductive film thermally photo curable

IT Adhesives  
 (anisotropic elec. conductive film containing modified polyvinyl acetal resin-based adhesive)

IT Polyvinyl acetals  
 Polyvinyl butyrals  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (anisotropic elec. conductive film containing modified polyvinyl acetal resin-based adhesive)

IT Films  
 (elec. conductive; anisotropic elec. conductive film containing modified polyvinyl acetal resin  
 -based adhesive)

IT Electric conductors  
 (films; anisotropic elec. conductive film containing modified polyvinyl acetal resin-based adhesive)

IT 79-10-7DP, Acrylic acid, polyvinyl acetal modified with 79-41-4DP, Methacrylic acid, polyvinyl acetal modified with  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (anisotropic elec. conductive film containing modified polyvinyl acetal resin-based adhesive)

L17 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1998:293246 CAPLUS  
 DN 129:10659  
 OREF 129:2219a,2222a  
 ED Entered STN: 20 May 1998  
 TI Recording material for aqueous ink  
 IN Miyake, Yoshitaka; Kamiyama, Ryuji  
 PA Sekisui Chemical Co. Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM B41M005-00  
 ICS B05D005-04  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10119421	A	19980512	JP 1996-282574	19961024
JP 3720929	B2	20051130		
PRAI JP 1996-282574		19961024		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 10119421	ICM B41M005-00 ICS B05D005-04 IPCI B41M0005-00 [ICM, 7]; B05D0005-04 [ICS, 7] IPCR B41M0005-00 [I,C*]; B41M0005-00 [I,A]; B05D0005-04 [I,C*]; B05D0005-04 [I,A]; B41M0005-50 [I,C*]; B41M0005-50 [I,A]; B41M0005-52 [I,A]	

AB The recording material has an ink-receiving layer on a support, wherein the ink-receiving layer contains a water-soluble modified polyvinyl acetal resin having a hydrophilic group such as COOM, SO3M, OSO3M (M = H, Li, Na), etc., and micropowder made from materials such as silica, alumina, etc. The recording material showed high ink-absorptivity and water fastness.  
 ST aq ink recording material vinyl acetal  
 IT Inks  
 Recording materials  
 (recording material for aqueous ink)  
 IT Polyvinyl acetals  
 Quaternary ammonium compounds, uses  
 Sulfonic acids, uses  
 RL: DEV (Device component use); USES (Uses)  
 (recording material for aqueous ink)  
 IT 97-65-4D, Itaconic acid, polymer with polyvinyl acetal 110-16-7D, Maleic acid, polymer with polyvinyl acetal 1344-28-1, Alumina, uses 7631-86-9, Silica, uses 14265-44-2, Phosphate, uses  
 RL: DEV (Device component use); USES (Uses)  
 (recording material for aqueous ink)

L17 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1996:731963 CAPLUS  
 DN 126:35774  
 OREF 126:7113a,7116a  
 ED Entered STN: 13 Dec 1996  
 TI Ceramic slurries for forming green sheets  
 IN Myake, Yoshitaka; Kamiyama, Takashi  
 PA Sekisui Chemical Co. Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese  
 IC ICM C04B035-622  
 ICS C04B035-632; C08L029-14; C08L033-02; C08L035-00; C08L041-00;  
 C08L067-04  
 CC 57-2 (Ceramics)

Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08259334	A	19961008	JP 1995-67488	19950327
	JP 3276261	B2	20020422		
PRAI	JP 1995-67488		19950327		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 08259334	ICM	C04B035-622
		ICS	C04B035-632; C08L029-14; C08L033-02; C08L035-00; C08L041-00; C08L067-04
		IPCI	C04B0035-622 [ICM,6]; C04B0035-632 [ICS,6]; C08L0029-14 [ICS,6]; C08L0033-02 [ICS,6]; C08L0035-00 [ICS,6]; C08L0041-00 [ICS,6]; C08L0067-04 [ICS,6]
		IPCR	C04B0035-622 [I,C*]; C04B0035-622 [I,A]; C04B0035-63 [I,C*]; C04B0035-632 [I,A]; C08L0029-00 [I,C*]; C08L0029-14 [I,A]; C08L0033-00 [I,C*]; C08L0033-02 [I,A]; C08L0035-00 [I,C*]; C08L0035-00 [I,A]; C08L0041-00 [I,C*]; C08L0041-00 [I,A]; C08L0067-00 [I,C*]; C08L0067-00 [I,A]; C08L0067-04 [I,A]

AB The slurries contain polyvinyl acetal resin or modified polyvinyl acetal resin having  $\geq 1$  of hydrophilic groups, polycaprolactam or oxidation agent, ceramic powder and plasticizer. The and uniform ceramic green sheets can be obtained.

ST slurry ceramic green sheet; polyvinyl acetal resin ceramic slurry; polycaprolactam ceramic slurry

IT Polyamides, properties

Polyvinyl acetals

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(ceramic slurry containing; ceramic slurries containing polyvinyl acetal resin and polycaprolactam for forming thin and uniform green sheets)

IT Slurries

(ceramic; ceramic slurries containing polyvinyl acetal resin and polycaprolactam for forming thin and uniform green sheets)

IT Ceramics

(slurries; ceramic slurries containing polyvinyl acetal resin and polycaprolactam for forming thin and uniform green sheets)

IT 12047-27-7, Barium titanate, properties

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(ceramic powders; in ceramic slurries containing polyvinyl acetal resin and polycaprolactam for forming thin and uniform green sheets)

IT 25038-54-4, Polycaprolactam, properties

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(ceramic slurry containing; ceramic slurries containing polyvinyl acetal resin and polycaprolactam for forming thin and uniform green sheets)

L17 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1996:144865 CAPLUS

DN 124:189570

OREF 124:34827a, 34830a  
 ED Entered STN: 13 Mar 1996  
 TI Ink ribbon for thermal sublimation transfer process  
 IN Shinohara, Satoru  
 PA Sony Corp., Japan  
 SO Eur. Pat. Appl., 22 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM B41M005-38  
 ICS B41M007-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 687574	A2	19951220	EP 1995-109361	19950616
	EP 687574	A3	19960313		
	EP 687574	B1	19980916		
	R: DE, FR, GB				
	JP 08002126	A	19960109	JP 1994-159238	19940617
	US 5672561	A	19970930	US 1995-474149	19950609
PRAI	JP 1994-159238	A	19940617		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES		
EP	687574	ICM	B41M005-38		
		ICS	B41M007-00		
		IPCI	B41M0005-38 [ICM,6]; B41M0007-00 [ICS,6]		
		IPCR	B41J0031-00 [I,C*]; B41J0031-00 [I,A]; B41M0005-26 [I,C*]; B41M0005-34 [I,C*]; B41M0005-34 [I,A]; B41M0005-382 [I,A]; B41M0005-395 [I,A]; B41M0005-40 [I,C*]; B41M0005-40 [I,A]; B41M0007-00 [I,C*]; B41M0007-00 [I,A]		
JP	08002126	ECLA	B41M005/34T; B41M005/38M; B41M007/00C; B41M005/395		
		IPCI	B41M0005-38 [ICM,6]; B41J0031-00 [ICS,6]		
		IPCR	B41J0031-00 [I,C*]; B41J0031-00 [I,A]; B41M0005-26 [I,C*]; B41M0005-34 [I,C*]; B41M0005-34 [I,A]; B41M0005-382 [I,A]; B41M0005-395 [I,A]; B41M0005-40 [I,C*]; B41M0005-40 [I,A]; B41M0007-00 [I,C*]; B41M0007-00 [I,A]		
US	5672561	ECLA	B41M005/395; B41M005/34T; B41M007/00C		
		IPCI	B41M0005-035 [ICM,6]; B41M0005-38 [ICS,6]		
		IPCR	B41J0031-00 [I,C*]; B41J0031-00 [I,A]; B41M0005-26 [I,C*]; B41M0005-34 [I,C*]; B41M0005-34 [I,A]; B41M0005-382 [I,A]; B41M0005-395 [I,A]; B41M0005-40 [I,C*]; B41M0005-40 [I,A]; B41M0007-00 [I,C*]; B41M0007-00 [I,A]		
		NCL	503/227.000; 156/235.000; 156/240.000; 156/241.000; 428/447.000; 428/500.000; 428/913.000; 428/914.000		
		ECLA	B41M005/395; B41M005/34T; B41M007/00C		
AB	Disclosed is a ink ribbon for thermal sublimation transfer process having ink layer(s) and laminate layer(s) sep. formed on one and the same surface of a substrate. The ink layer(s) contains/contain a releasing resin, preferably a silicone-modified polyvinyl acetal resin, as the binder. The ink ribbon is applicable even to printing paper that has not been made releasable or has been made releasable but only slightly, while preventing the hot-sealing of the ink ribbon to the printing paper. The laminate layer(s) of the ink ribbon is/are uniformly transferred onto the dye-receiving layer of printing paper.				
ST	ink ribbon sublimation transfer printing				

IT Vinyl acetal polymers  
 RL: DEV (Device component use); USES (Uses)  
 (silicone-modified; ink layer of sublimation transfer ink ribbon)  
 IT Printing, nonimpact  
 (sublimation-transfer, ink ribbon for thermal sublimation transfer  
 process)  
 IT Printer ribbons  
 (thermal-transfer, ink ribbon for thermal sublimation transfer process)

L17 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1994:496064 CAPLUS

DN 121:96064

OREF 121:17035a,17038a

ED Entered STN: 20 Aug 1994

TI Photosensitive composition for photosensitive printing plate

IN Sekya, Toshuki

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 30 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-021

ICS G03F007-00; G03F007-027; G03F007-031; G03F007-035

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)

Section cross-reference(s): 35

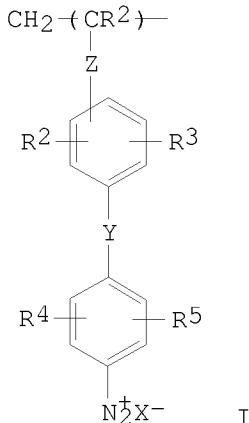
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05165206	A	19930702	JP 1991-333542	19911217
PRAI	JP 1991-333542			19911217	

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 05165206		ICM	G03F007-021
		ICS	G03F007-00; G03F007-027; G03F007-031; G03F007-035
		IPCI	G03F0007-021 [ICM,5]; G03F0007-016 [ICM,5,C*]; G03F0007-00 [ICS,5]; G03F0007-027 [ICS,5]; G03F0007-031 [ICS,5]; G03F0007-035 [ICS,5]; G03F0007-032 [ICS,5,C*]
		IPCR	G03F0007-00 [I,C*]; G03F0007-00 [I,A]; G03F0007-016 [I,C*]; G03F0007-021 [I,A]; G03F0007-027 [I,C*]; G03F0007-027 [I,A]; G03F0007-031 [I,C*]; G03F0007-031 [I,A]; G03F0007-032 [I,C*]; G03F0007-035 [I,A]

GI



AB A photosensitive composition contains a diazonium copolymer having repeating units (I) and [CH<sub>2</sub>CR<sub>6</sub>(W)] (R<sub>1</sub>, R<sub>6</sub> = H, Me; R<sub>2</sub> - R<sub>5</sub> = H, alkyl alkoxy, halo, OH; Y = NH, O, S; X- = anion; W = substituent containing an acidic H), polyurethane resin having a substituent containing an acidic H, or a modified polyvinyl acetal resin. A photosensitive composition contains a photodimerizable crosslinking polymer having unsatd. double bonds, a sensitizer, and the above diazonium copolymer. A photosensitive composition contains a polymerizable compound having an ethylenic unsatd. bonds, photopolylmn. initiator, a polymer, and the above diazonium copolymer. These photosensitive compns. provide alkali-developable photosensitive printing plates with high sensitivity, excellent printing resistance, excellent developability in development with an alkali developer, and little diazo residue.

ST diazonium copolymer photosensitive compn printing plate; polyurethane photosensitive compn printing plate; alkali developable photosensitive compn

IT Printing plates  
(alkali-developable, photosensitive compns. containing diazonium copolymer and polyurethanes for)

IT Photoimaging compositions and processes  
(photopolymerizable, alkali-developable, containing diazonium copolymer and polyurethanes, for printing plate)

IT Urethane polymers, preparation  
RL: PREP (Preparation)  
(preparation of, for photosensitive compns. of printing plate)

IT 4083-64-1  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(acylation by, of bis(hydroxymethyl)propionic acid-diphenylmethane diisocyanate copolymer)

IT 540-51-2, Ethylene bromohydrin  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(hydroxyethylation by, of bis(hydroxymethyl)propionic acid-diphenylmethane diisocyanate copolymer)

IT 156477-30-4 156580-62-0 156580-65-3 156580-68-6 156608-03-6  
156646-14-9  
RL: USES (Uses)  
(photosensitive composition containing, for alkali-developable photosensitive printing plate)

IT 85023-20-7DP, acylated and hydroxyethylated 141432-31-7P  
149252-24-4DP, product from acid hydrolysis and diazotization  
151483-02-2P 152048-37-8P 152048-39-0P 152048-42-5P 152048-44-7P  
152048-46-9P 153991-98-1P 156477-31-5P 156477-32-6P 156477-33-7P  
156477-34-8P 156477-35-9P  
RL: PREP (Preparation)  
(preparation of, photosensitive composition containing, for alkali-developable photosensitive printing plate)

L17 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 1982:532310 CAPLUS  
DN 97:132310  
OREF 97:21899a,21902a  
ED Entered STN: 12 May 1984  
TI Intermediate films for safety glass  
PA Kuraray Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DT Patent

LA Japanese  
IC C03C027-12; C08F008-12; C09J003-14  
CC 57-1 (Ceramics)

Section cross-reference(s): 37

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57077051	A	19820514	JP 1980-154141	19801031
	JP 02010785	B	19900309		
PRAI	JP 1980-154141		19801031		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 57077051	IC	C03C027-12; C08F008-12; C09J003-14
		IPCI	C03C0027-12; C08F0008-12; C08F0008-00 [C*]; C09J0003-14
		IPCR	C08F0008-00 [I,C*]; C08F0008-00 [I,A]; C03C0027-12 [I,C*]; C03C0027-12 [I,A]; C08F0008-12 [I,A]; C08F0008-28 [I,A]; C08F0016-00 [I,C*]; C08F0016-14 [I,A]; C08F0016-38 [I,A]; C08F0020-00 [I,C*]; C08F0020-52 [I,A]; C08F0026-00 [I,C*]; C08F0026-00 [I,A]; C08F0026-02 [I,A]; C08F0216-00 [I,C*]; C08F0216-14 [I,A]; C08F0216-38 [I,A]; C08F0220-00 [I,C*]; C08F0220-60 [I,A]; C08F0226-00 [I,C*]; C08F0226-02 [I,A]; C08F0226-06 [I,A]; C09J0129-00 [I,C*]; C09J0129-14 [I,A]

AB Films made from cation group-containing modified polyvinyl acetal resin are used as intermediate films for safety glass. Thus, 100 parts modified polyvinyl butyral resin was mixed with 50 parts triethylene glycol bis(2-ethylbutyrate) [95-08-9], shaped to a 0.7 mm-thick film, sandwiched by 2 glass sheets, and pressed at 120° and 10 kg/cm<sup>2</sup> to give a high-strength safety glass.

ST safety glass polymer film

IT Vinyl acetal polymers

RL: USES (Uses)  
(butyrrals, laminated glass intermediate films)

IT Glass, oxide

RL: USES (Uses)  
(safety, polymer film for)

IT 95-08-9

RL: USES (Uses)  
(laminated glass intermediate films)

L17 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1951:11991 CAPLUS

DN 45:11991

OREF 45:2122a-b

ED Entered STN: 22 Apr 2001

TI Organopolysiloxane-insulated copper conductor

IN Mathes, Kenneth N.

PA General Electric Co.

DT Patent

LA Unavailable

CC 13 (Chemical Industry and Miscellaneous Industrial Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2523037		19500919	US 1946-688319	19460803

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	US 2523037	IPCR	H01B0003-46 [I,C*]; H01B0003-46 [I,A]; H01B0007-17 [I,C*]; H01B0007-29 [I,A]

NCL 427/058.000; 174/120.000SR; 427/118.000; 427/126.100;  
427/203.000; 427/204.000; 428/383.000; 428/391.000

AB A heat- and abrasion-resistant insulated conductor is formed by coating with a hydrocarbon-substituted polysiloxane resin and dusting with a powdered siliceous material to promote the adhesion of an outer coating of modified polyvinyl acetal resin.  
IT Siloxanes  
(copper insulated with)  
IT Insulators (electric)  
(siloxanes)

=>

=> e us20040260020/pn

E1 1 US20040260018/PN  
E2 1 US20040260019/PN  
E3 1 --> US20040260020/PN  
E4 1 US20040260021/PN  
E5 1 US20040260022/PN  
E6 1 US20040260023/PN  
E7 1 US20040260024/PN  
E8 1 US20040260025/PN  
E9 1 US20040260026/PN  
E10 1 US20040260027/PN  
E11 1 US20040260028/PN  
E12 1 US20040260029/PN

=> s e3;d all

L18 1 US20040260020/PN

L18 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2003:262135 CAPLUS  
DN 138:274120  
ED Entered STN: 04 Apr 2003  
TI Modified polyvinyl acetal resin  
IN Miyake, Yoshitaka; Sawada, Masakazu  
PA Sekisui Chemical Co., Ltd., Japan  
SO PCT Int. Appl., 74 pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
IC ICM H01M010-40  
      ICS H01M014-00; H01G009-00; H01B001-06; H01L031-04; G01N027-46;  
          C08G065-04  
CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003028143	A1	20030403	WO 2002-JP9669	20020920
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002330316	A1	20030407	AU 2002-330316	20020920

JP 2003183325	A	20030703	JP 2002-274605	20020920
JP 4133158	B2	20080813		
EP 1429400	A1	20040616	EP 2002-765606	20020920
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			
US 20040260020	A1	20041223	US 2004-490037	20040730 <--
JP 2008156632	A	20080710	JP 2007-318385	20071210
PRAI JP 2001-289367	A	20010921		
JP 2001-289368	A	20010921		
JP 2002-274605	A3	20020920		
WO 2002-JP9669	W	20020920		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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WO 2003028143		ICM	H01M010-40
		ICS	H01M014-00; H01G009-00; H01B001-06; H01L031-04; G01N027-46; C08G065-04
		IPCI	H01M0010-40 [ICM, 7]; H01M0010-36 [ICM, 7, C*]; H01M0014-00 [ICS, 7]; H01G0009-00 [ICS, 7]; H01B0001-06 [ICS, 7]; H01L0031-04 [ICS, 7]; G01N0027-46 [ICS, 7]; C08G0065-04 [ICS, 7]; C08G0065-00 [ICS, 7, C*]
		IPCR	C08F0008-00 [I, C*]; C08F0008-28 [I, A]; H01M0002-16 [N, C*]; H01M0002-16 [N, A]; H01M0004-62 [N, C*]; H01M0004-62 [N, A]; H01M0006-00 [I, C*]; H01M0006-22 [I, A]; H01M0010-36 [I, C*]; H01M0010-40 [I, A]
		ECLA	C08F008/28+216/06; H01M006/22; H01M010/40B; T01M; T01M; T01M; T01M; T01M
AU 2002330316		IPCI	H01M0010-40 [ICM, 7]; H01M0010-36 [ICM, 7, C*]; H01M0014-00 [ICS, 7]; H01G0009-00 [ICS, 7]; H01B0001-06 [ICS, 7]; H01L0031-04 [ICS, 7]; C08G0065-04 [ICS, 7]; C08G0065-00 [ICS, 7, C*]
JP 2003183325		IPCI	C09D0011-10 [I, A]; C09D0129-14 [I, A]; C09D0129-00 [I, C*]; C09J0129-14 [I, A]; C09J0129-00 [I, C*]; G03C0001-498 [I, A]; C08F0008-48 [I, A]; C08F0008-00 [I, C*]
		IPCR	C04B0035-63 [I, C*]; C04B0035-632 [I, A]; C04B0035-622 [I, C*]; C04B0035-622 [I, A]; C08F0008-00 [I, C*]; C08F0008-48 [I, A]; C08L0029-00 [I, C*]; C08L0029-14 [I, A]
EP 1429400		IPCI	H01M0002-00 [ICM, 7]
		IPCR	H01M0002-00 [I, A]; C08F0008-00 [I, C]; C08F0008-28 [I, A]; C08F0216-00 [I, C]; C08F0216-38 [I, A]; H01M0002-00 [I, C]; H01M0002-16 [N, C*]; H01M0002-16 [N, A]; H01M0004-62 [N, C*]; H01M0004-62 [N, A]; H01M0006-00 [I, C*]; H01M0006-22 [I, A]; H01M0010-36 [I, C*]; H01M0010-40 [I, A]
		ECLA	H01M006/22; H01M010/40B
US 20040260020		IPCI	C08F0008-00 [ICM, 7]
		IPCR	C08F0008-00 [I, C*]; C08F0008-28 [I, A]; H01M0002-16 [N, C*]; H01M0002-16 [N, A]; H01M0004-62 [N, C*]; H01M0004-62 [N, A]; H01M0006-00 [I, C*]; H01M0006-22 [I, A]; H01M0010-36 [I, C*]; H01M0010-40 [I, A]
		NCL	525/061.000
		ECLA	C08F008/28+216/06; H01M006/22; H01M010/40B; T01M; T01M; T01M; T01M; T01M
JP 2008156632		IPCI	C08L0029-14 [I, A]; C08L0029-00 [I, C*]; C08K0005-103 [I, A]; C08K0005-00 [I, C*]; C08K0003-00 [I, A]; C04B0035-622 [I, A]; C04B0035-632 [I, A]; C04B0035-63 [I, C*]; H01G0004-12 [I, A]; H01G0004-30 [I, A]
		FTERM	4G030/AA10; 4G030/AA16; 4G030/BA09; 4G030/CA08; 4G030/GA09; 4G030/GA11; 4G030/GA14; 4G030/GA15; 4G030/GA17; 4G030/PA22; 4J002/CB001; 4J002/DE076;

4J002/DE086; 4J002/DE096; 4J002/DE106; 4J002/DE136;  
4J002/DE146; 4J002/DE156; 4J002/DJ006; 4J002/DL006;  
4J002/DM006; 4J002/EH047; 4J002/EW007; 4J002/FD016;  
4J002/FD027; 4J002/GQ01; 4J002/HA08; 5E001/AB03;  
5E001/AE02; 5E001/AE03; 5E001/AF06; 5E001/AH01;  
5E001/AJ02; 5E082/AB03; 5E082/BB07; 5E082/EE04;  
5E082/GG10; 5E082/MM22; 5E082/MM23; 5E082/MM24

AB The resin is obtained by acetalizing a modified polyvinyl alc. containing ethylene units randomly arranged in the main chain and having ethylene content 1-20 mol% and a degree of saponification  $\geq$  80 mol%. The resin which is excellent in flexibility, adhesion to resin substrates in a high-humidity atmospheric, heat resistance, thermal decomposability, moisture resistance, and toughness, has a low oxygen permeability and moderate adhesive properties, gives a low-viscosity solution having excellent long-term viscosity stability; and is used for adhesive compns., inks, coating material compns., heat-developable photosensitive materials, slurry compns. for ceramic green sheets, and the ceramic green sheets.

ST modified polyvinyl acetal resin ethylene content sapon degree;  
acetalization polyvinyl alc aldehyde; adhesive ink heat developable photosensitive mat ceramic green sheet

IT Adhesives  
(adhesive compns. containing modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT Aminoplasts  
Epoxy resins, uses  
Phenolic resins, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(adhesive compns. containing modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT Polyvinyl acetals  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(characteristics and manufacture of modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT Inks  
(inks containing modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT 9003-08-1, Melamine resin  
RL: TEM (Technical or engineered material use); USES (Uses)  
(adhesive compns. containing modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT 9002-89-5, Poly(vinyl alcohol)  
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
(characteristics and manufacture of modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT 99-98-9, N,N-Dimethyl-p-phenylenediamine 2489-05-6, Silver behenate  
7446-14-2, Lead sulfate 9003-39-8, Polyvinylpyrrolidone 28279-38-1  
RL: TEM (Technical or engineered material use); USES (Uses)  
(heat-developable photosensitive materials containing modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT 75-07-0, Acetaldehyde, processes 123-72-8, n-Butylaldehyde  
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
(reaction products with acid modified poly(vinyl alcs.);  
characteristics and manufacture of modified polyvinyl acetal resins with controlled ethylene content and saponification degree)

IT 7647-01-0, Hydrochloric acid, processes  
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
(reaction products with poly(vinyl alc.) and aldehydes; characteristics and manufacture of modified polyvinyl acetal resins with controlled ethylene

content and saponification degree)  
IT 84-74-2, Dibutylphthalate 12047-27-7, Barium titanate, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(slurry compns. for ceramic green sheets containing modified polyvinyl  
acetal resins with controlled ethylene content and saponification degree)  
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE  
(1) Kuraray Co Ltd; JP 63-79741 A 1988 CAPLUS  
(2) Kuraray Co Ltd; JP 63-79752 A 1988 CAPLUS  
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
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